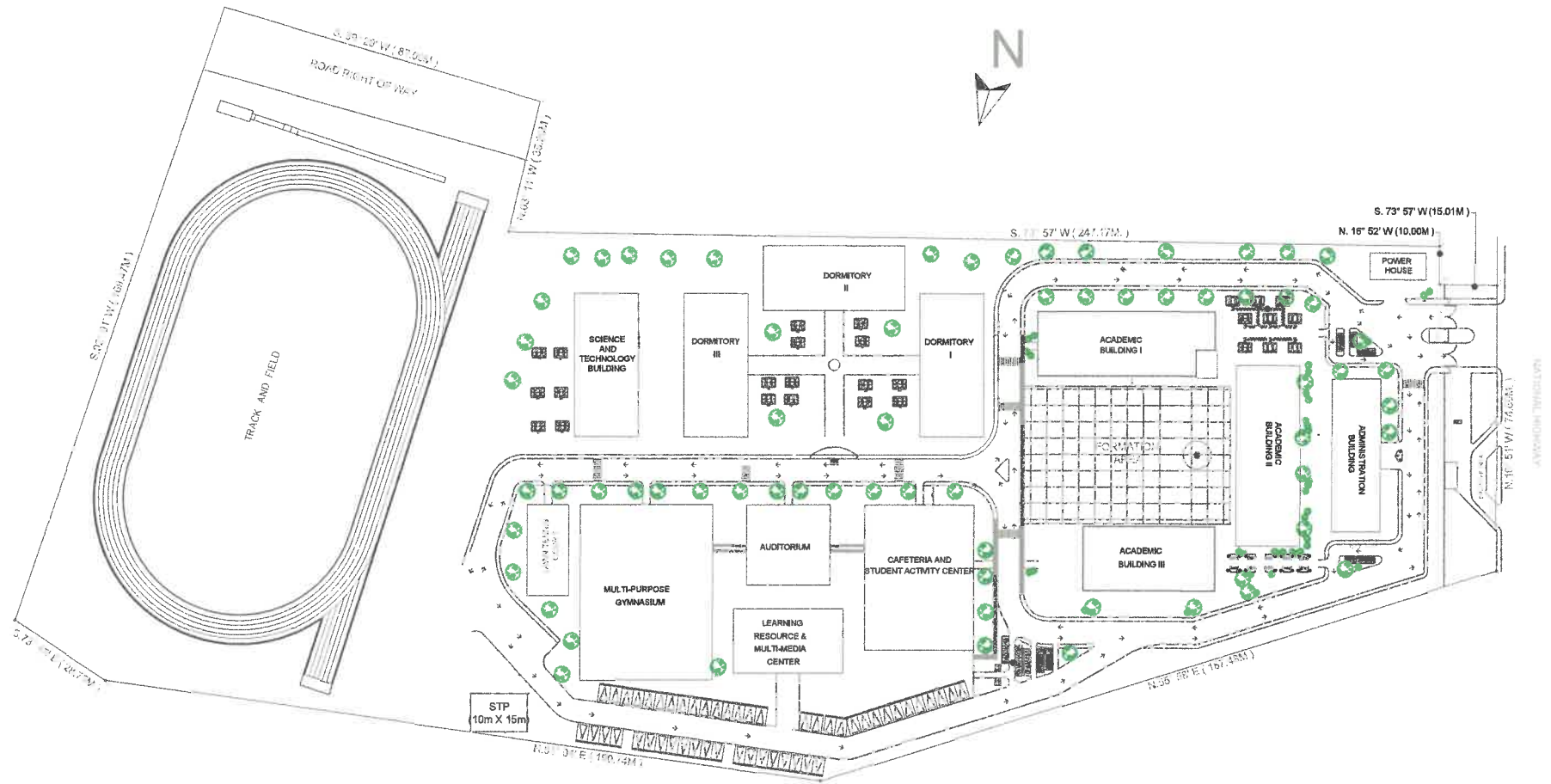


ANNEX A



CAMPUS MASTER PLAN



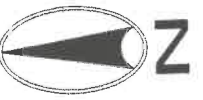
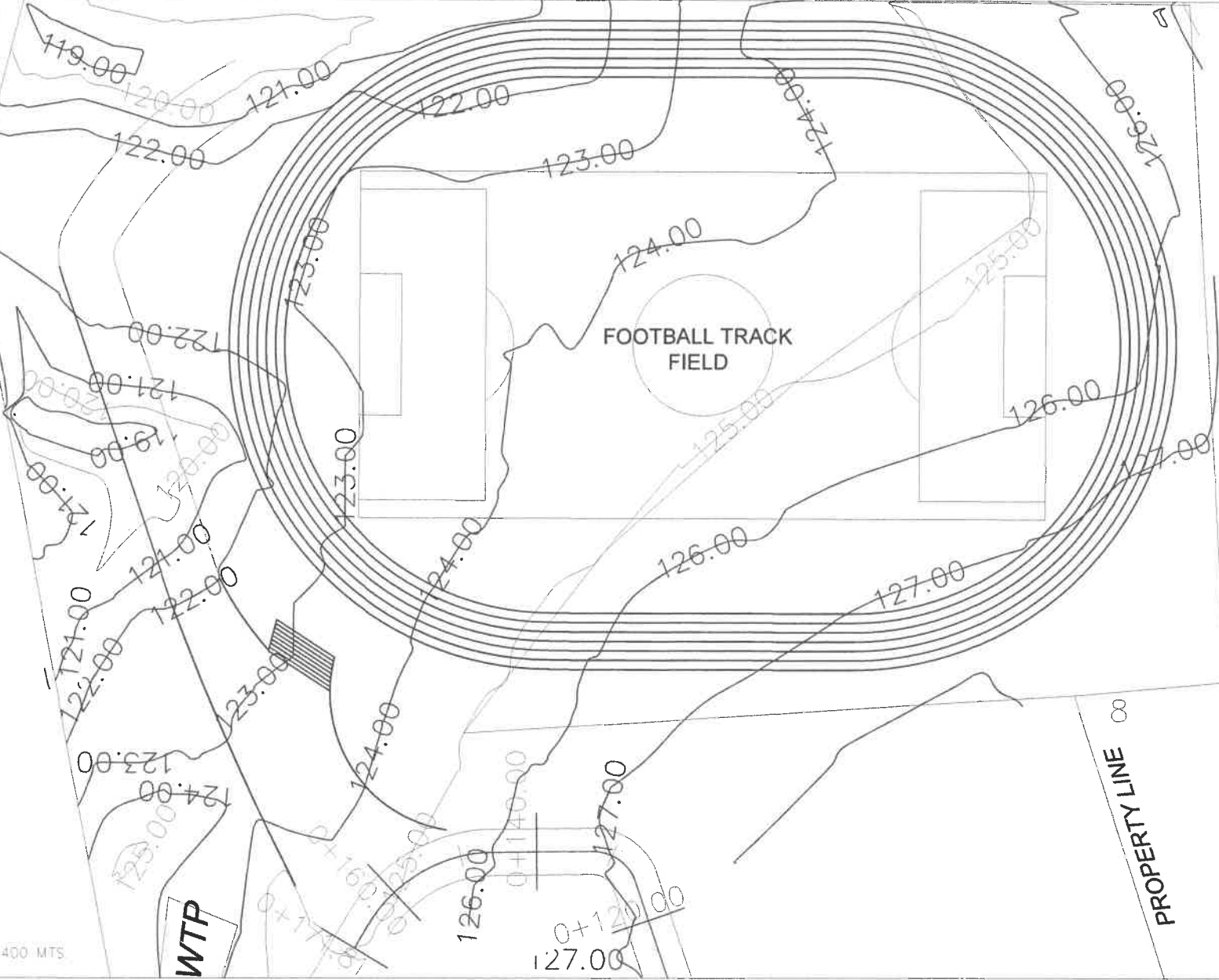
ANNEX B

LOT 5824-B

LOT 5820, CSD-265

SCALE : 1 : 400 MTS

5
4



ROAD RIGHT OF WAY

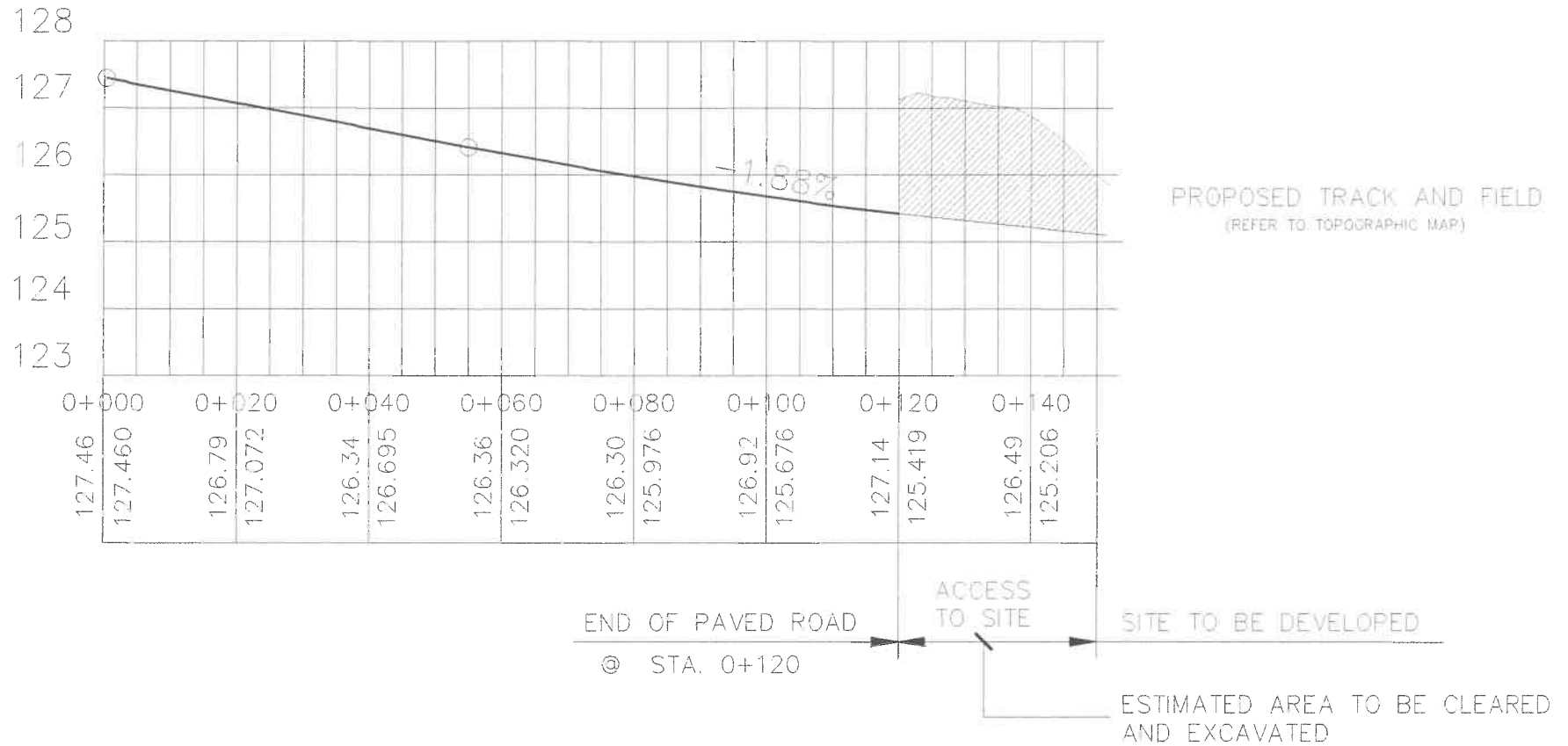
PROPERTY LINE

LOT 5823, CSD-265

7



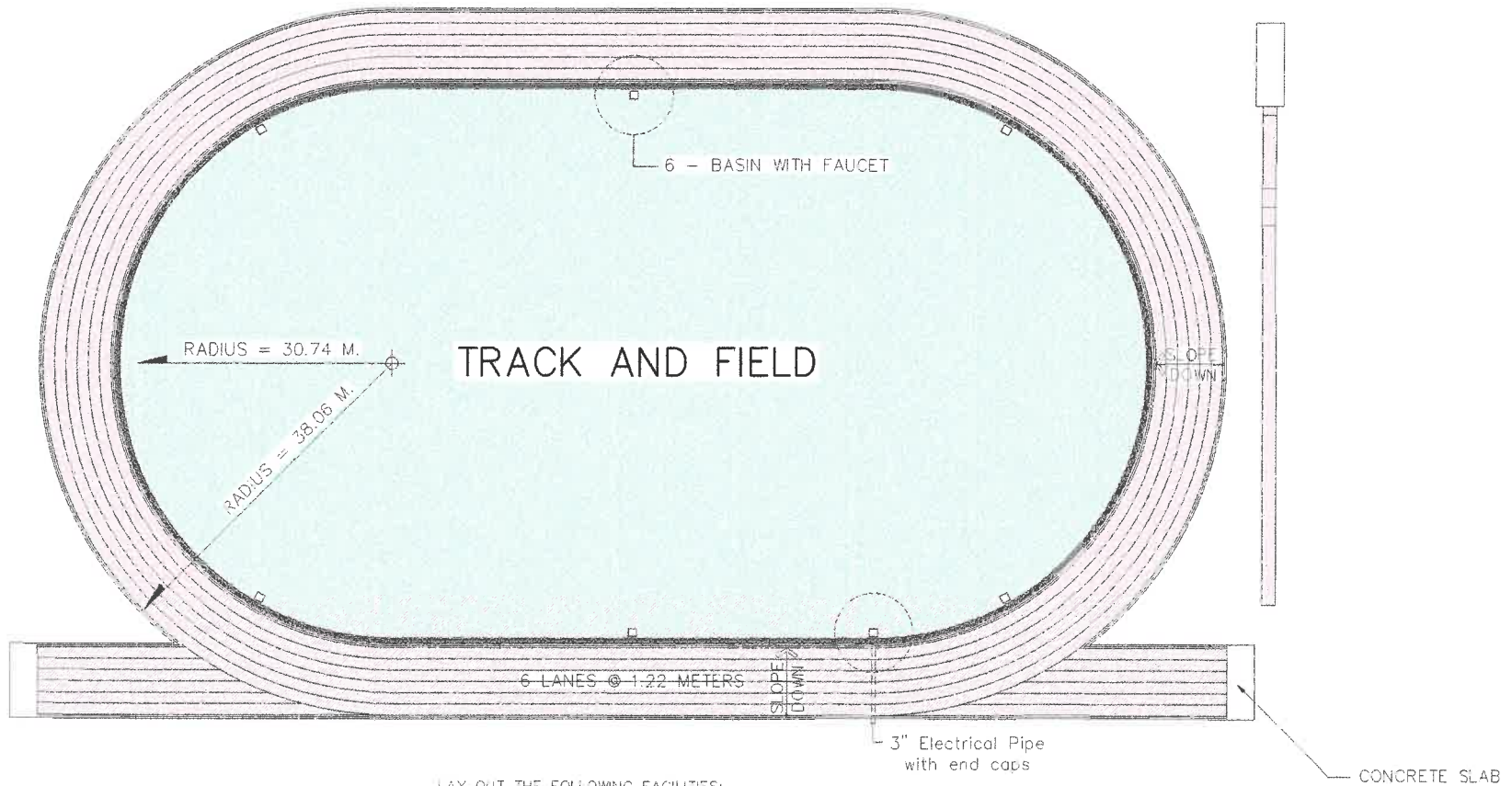
ANNEX C



ROAD PROFILE



ANNEX D



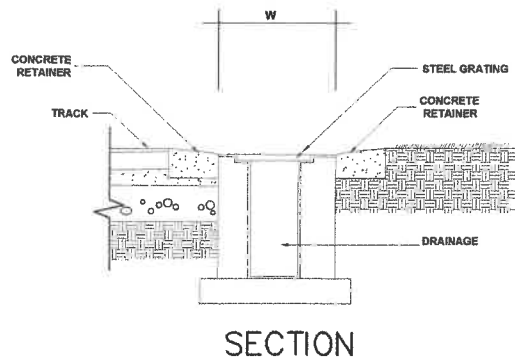
LAY OUT THE FOLLOWING FACILITIES:

- | | |
|---------------------------------|-------------------------------------|
| 1 Soccer Field | 5 High Jump Facility |
| 2 300m Track | 6 Shot Put Facility |
| 3 Softball/Baseball Facility | 7 Discuss and Hammer Throw Facility |
| 4 Long and Triple Jump Facility | |

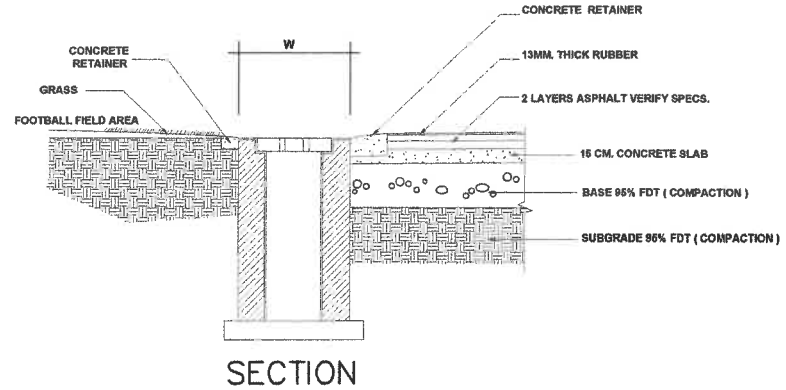
PLAN (TRACK AND FIELD)

 <p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF SCIENCE AND TECHNOLOGY PHILIPPINE SCIENCE HIGH SCHOOL ZAMBOANGA PENINSULA REGION CAMPUS BRGY. COGON, DIPOLOG CITY, ZAMBOANGA DEL NORTE</p>	PROJECT TITLE:	PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET NO.:
	CONSTRUCTION OF TRACK AND FIELD	DESIGN AND BUILD COMMITTEE	MILO S. SALDON ADMINISTRATIVE OFFICER-V	LOUIE G. JAMORA PAE, MSc CAMPUS DIRECTOR	1/1

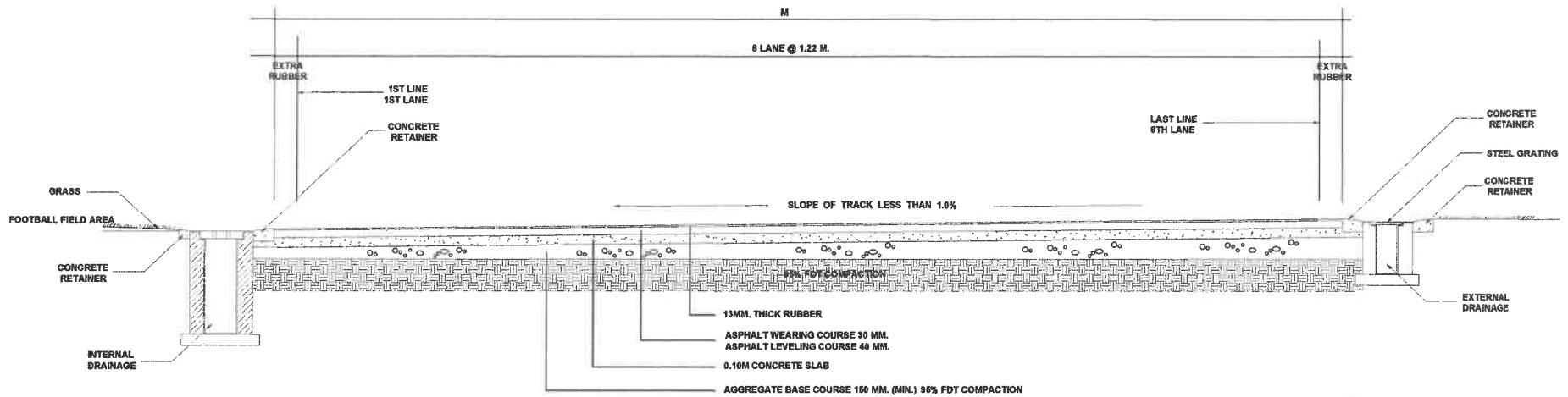
ANNEX E




SECTION
EXTERNAL DRAINAGE



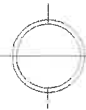
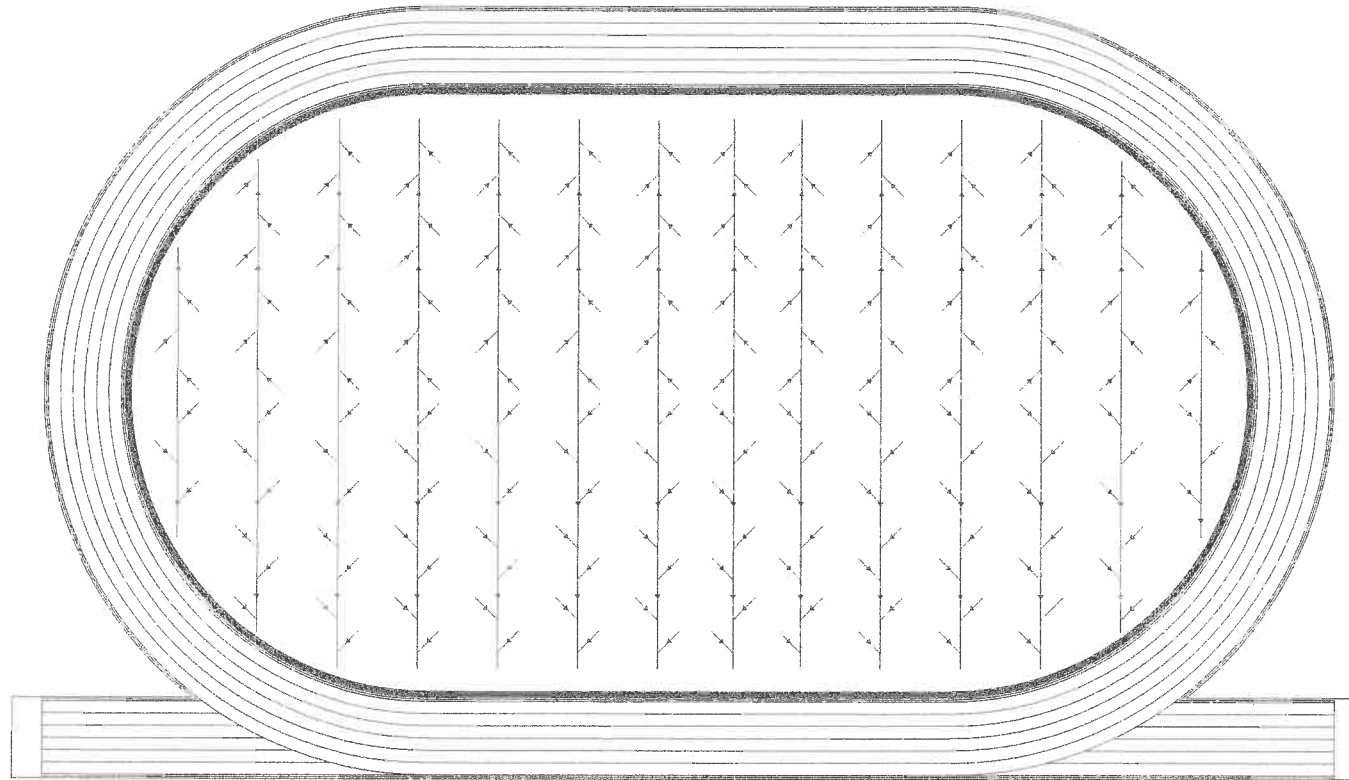
SECTION
INTERNAL DRAINAGE



SECTION OF TRACK AND DRAINAGE

	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF SCIENCE AND TECHNOLOGY PHILIPPINE SCIENCE HIGH SCHOOL ZAMBOANGA PENINSULA REGION CAMPUS BRGY. COGON, DIPLOLOG CITY, ZAMBOANGA DEL NORTE	PROJECT TITLE: CONSTRUCTION OF TRACK AND FIELD	PREPARED BY: _____ DESIGN AND BUILD COMMITTEE	RECOMMENDING APPROVAL: _____ MILO S. GALDON ADMINISTRATIVE OFFICER-V	APPROVED: _____ LOUIE C. JAMORA PAE, MSc CAMPUS DIRECTOR	SHEET NO.: 1 1

ANNEX F



PERFORATED PIPES LAYOUT INSIDE THE TRACK

 <p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF SCIENCE AND TECHNOLOGY PHILIPPINE SCIENCE HIGH SCHOOL ZAMBOANGA PENINSULA REGION CAMPUS BRGY. COGON, DIPOLOG CITY, ZAMBOANGA DEL NORTE</p>	PROJECT TITLE	PREPARED BY	RECOMMENDING APPROVAL	APPROVED	SHEET NO.
	CONSTRUCTION OF TRACK AND FIELD	DESIGN AND BUILD COMMITTEE	MILO S. SALDON ADMINISTRATIVE OFFICER-IV	LOUIE C. JAMORA PAE, MSc CAMPUS DIRECTOR	1 1

ANNEX G



Sample of a Running Track Protector

[Handwritten signature]

ANNEX H

SPECIFICATIONS

I. GENERAL REQUIREMENTS

1. Detailed Engineering Fees

- 1.1 Include the professional design fees of all architecture and engineering professionals set according to law or to standards of the profession.

2. Mobilization/Demobilization

- 2.1 This item shall include all activities and associated costs for transportation of Contractor's personnel, equipment and operating supplies to the site, and establishment of temporary facilities.
- 2.2 Demobilization shall include all activities and costs for transportation of personnel, equipment and supplies not required or included in the contract from the site including the disassembly, removal and site cleanup of temporary facilities.

3. Temporary Facilities

- 3.1 This item includes the construction of temporary facilities for storage of materials and Contractor's Field Office.
- 3.2 The Contractor shall make his own arrangements for the provision to all Temporary Facilities of:
 - a. Electrical power and distribution
 - b. Water supply, storage and distribution; and
 - c. Storage, treatment and collection of sewage

4. Construction Safety and Health

- 4.1 This item shall include all activities and associated costs for transportation of Contractor's personnel, equipment and operating supplies to the site, and establishment of temporary facilities.

5. Permits and Clearances

- 5.1 Necessary permits, clearances or licenses including occupancy permit shall be provided by the Contractor and shall pay all fees and other incidental expenses.

6. Project Identification and Sign

- 6.1 The Contractor must provide project billboard showing information about the project.
- 6.2 The project billboard shall be strategically placed within the site vicinity; *(as provide on the General Guidelines and Legal Mandates of the Commission on Audit to promote good governance and/or publicity for otherwise relating to the Project/Program/Activities (PPA) shall be made at the least possible cost)*. Hence, for infrastructure projects, two (2) tarpaulin signboards must be suitably framed for outdoor display at the project location, and shall be posted as the award has been made. The design and format of the tarpaulin, shall have the following specifications:

- Tarpaulin, white, 8ft x 8ft
- Resolution: 70 dpi
- Font: Helvetica
- Font Size: Main Information - 3"
- Font Size: Sub-information - 1"
- Font Color: Black



7. Survey

- 7.1 The Contractor shall pay for the survey services needed to confirm and certify the precise location and positioning for the installation of the synthetic tracks and other works similar in nature required by the Contractor.
- 7.2 The Contractor through its contracted Surveyor, shall promptly verify and certify to lines and levels of any portions or subdivision of work at any time it may be deemed necessary by the Owner's representative. Any deviation from the Drawings shall be certified to the Owner's representative within 24 hours of discovery of same.
- 7.3 The Surveyor shall not be a regular employee of the Contractor, nor shall he have interest in the Contract. He shall be employed by the Contractor in laying out the work, it being intended that the Surveyor shall present an independent and disinterested verification of the project's layout.

8. Hauling

- 8.1 The allowable weight or load for each truck during hauling shall limit to 5-ton that passes through the road network.

II. EARTHWORKS

PART 1

1. Clearing and Grubbing

- 1.1 All surface objects and all trees, stumps, roots and other protruding obstructions, not designated to remain shall be cleared and grubbed. The work shall comply with the *DPWH Clearing and Grubbing Specification*.

2. Excavation Works

- 2.1 The work method must include protecting the excavated areas from slippage and the surface run-off of water and other materials to adjacent areas.
- 2.2 The concept cut and fill is applicable. Excavated materials shall be set aside for re-use and must meet the Backfill/Embankment requirement.
- 2.3 The contractor shall provide all necessary means for dewatering excavations and maintain it free of all water, including groundwater or storm water.
- 2.4 When unsuitable material is excavated below embankments or below normal subgrade level, the void so formed shall be backfilled with suitable material, compacted in each 150m layer to 95% of its maximum dry density.
- 2.5 Slopes in excavations shall be formed and maintained to prevent the formation of standing water. All excavations shall be finished to reasonably smooth and uniform surfaces.
- 2.6 Where pumping is necessary, the material in and around the excavations shall not be disturbed by pumping, and all slumps shall be formed clear or excavations for permanent work.
- 2.7 Water pumping at low points shall be provided continuously until the permanent drainage systems are finished and connected to the existing drainage network.
- 2.8 Effective temporary decantation basins shall be installed before the water is drained into recently completed or existing drainage systems. Murky or polluted storm water shall not be permitted to drain directly outside of the site and into adjacent areas.
- 2.9 The Contractor shall organize each section of the earthworks rationally so as to eliminate prolonged exposure of subgrades and bottoms of excavations during bad weather.
- 2.10 All excavated grades shall be kept well drained at all times with no storm water standing on the surface and protected as necessary to avoid deterioration.
- 2.11 Unsuitable material shall be disposed of according to the instructions of the Resident Engineer.



- 2.12 Prospective bidder shall conduct a site visit/investigation and review the topographic map on the work areas to establish an approximate cost estimates.
- 2.13 Other items not mentioned above shall comply with the *DPWH Excavation Specification*.


3. Embankment/Backfill and Compaction

- 3.1 Prior to commencement of the work, the Contractor shall obtain the Resident Engineer's approval for the survey of the embankment area including the materials to be used.
- 3.2 Approved and clean materials for backfill shall be placed in layers not exceeding 150mm (6") each layer being thoroughly compacted by tamping or rolling until the correct grade of 95% compaction is attained. This work shall extend to area indicated in the master plan.
- 3.3 In the embankment work, operations shall be started at the lowest elevation and depressions so as to avoid the retention of storm water in the work area.
- 3.4 Each of the successive layers of the embankment shall be placed and compacted with the proper moisture content of soil to reach the elevation designated on the Drawings.
- 3.5 Embankment material, generally, shall be placed and spread immediately on the prepared surface upon arrival at the work location. Stockpiling of embankment material will not be permitted, especially during the wet season.
- 3.6 Once embankment fill material is at the correct moisture content the surface shall be graded level before compaction operations commence.
- 3.7 Hauling and leveling equipment shall be routed and distributed over fill areas in such a manner as to reduce rutting and uneven compaction.
- 3.8 Successive layers of material will not be placed until the underlying layers have been tested for compliance with the specified quality requirements.
- 3.9 During construction, and until the pavement and permanent drainage works have been completed, the embankment surfaces shall be suitably protected, cambered and graded to drain surface water, through suitable side ditches or gutters to avoid erosion.
- 3.10 Damaged surfaces of the embankment caused by the construction operation, storm water or the like shall either be removed or be scarified to a reasonable depth and the surfaces shall be reworked to correct the moisture content and compacted again to the prescribed density. Such operation shall be instructed by the Engineer and shall be at the expense of the Contractor.
- 3.11 The surface of the embankment slope shall be trimmed, finished, compacted and protected so as to keep the slope firmly settled. Should soil loss or movement take place on the slope because of landslips or other causes, the Contractor shall repair and restore the portion at his own expense to the satisfaction of the Engineer.
- 3.12 Other items not mentioned above shall comply with the *DPWH Embankment and Backfilling and Compaction Specifications*.

4. Subgrade Preparation

- 4.1 Preparation of the subgrade for the support of the synthetic running surface and sub grade inside the track. This work shall extend for about 1.0-meter width of the track surface.
- 4.2 Culverts or cross drains going to the discharge outlet shall be completely constructed before commencing this work.
- 4.3 Complete work shall comply with the *DPWH Subgrade Preparation Specifications*

5. Aggregate Base Course

- 5.1 The subgrade of the running track, long and triple jump, and area inside the track oval shall be checked and accepted first before starting the work.
 - 5.2 After placement of this material over the prepared subgrade surface, compaction of the material shall commence immediately. The material shall be compacted to a density of not less than 95% of Maximum Dry Density as determined to AASHTO T-180 Method D. The field determination of density shall be made in accordance with AASHTO T 191.
 - 5.3 The compacted base course shall be maintained by the Contractor at his expense, keeping it from loose particles and other defects until such time the concrete pavement is applied.
 - 5.4 Complete work shall comply with the *DPWH Aggregate Base Course Specifications*
- 

6. Concrete Pavement

- 6.1 Shall be Portland Cement Concrete Pavement 100mm thickness with reinforcement, constructed on the prepared base.
- 6.2 The cement content and the proportions of aggregate and water will produce workable concrete having a slump of between 40 and 75mm if not vibrated or between 10 and 40 if vibrated, and a flexural strength of not less than 3.8 MPa when tested by the third-point method or 4.5 MPa when tested by the mid-point method at fourteen (14) days in accordance with AASHTO T 97 and T 177 respectively; or a compressive strength of 24.1 MPa for cores taken at fourteen (14) days and tested in accordance with AASHTO T 24.
- 6.3 Complete work shall comply with the *DPWH Item 311- Portland Cement Concrete Pavement Specifications*.

7. Soil Poisoning

- 7.1 Contractor shall apply soil poisoning treatment to over-all excavated surfaces inclusive of surfaces to be paved over and around the drainage concrete structure.

III. SPECIALTY WORKS

1. Asphalt Works

- 1.1 **Asphalting Works (Over concrete slab)**
Application by spraying of Bitumol on top of concrete slab on track at D-Sections. Paving of asphalt must be done based on required system and Material Specifications (and other works specified by installer for the purpose of compatibility of rubber and asphalt or approved by the Department of Public Works and Highways (DPWH) material testing is required.
- 1.2 **Work Methodology on Hot-Mix Asphalt Paving (HMA)**
Asphalt paving operations require careful planning and preparations. The area or surface to be paved must be properly prepared. Vehicles and equipment must be available and in good operating condition to provide steady flow of materials to prevent delays in the operation. Compaction pattern must be prompt and adequate to produce a high quality and durable asphalt pavement. Certain processes and methods shall be followed in the course of the hot-mix asphalt paving operation.

2. Base/Surface Preparations

- 2.1 Base prior to asphalt paving is concrete pavement
- 2.2 Concrete pavement:
The full width of the surface to be treated shall be cleaned of loose and foreign materials by means of power broom or power blower, supplemented as necessary by hand sweeping.

3. Application of Bituminous Primer/Tack Coat

- 3.1 **Prime Coat**
Bituminous prime coat shall be applied by means of pressure distribution or hand spray at a heated temperature range of 32°C to 68°C. The rate of application of bituminous material shall be within the range of 1 to 2 liters per square meter or the exact rate to be ordered by the Engineer. The prime coat shall be left undisturbed for a period of at least 24 hours and shall not be opened to traffic until it has penetrated and cured sufficiently. Care shall be taken that the application of bituminous material is not in excess of the specified amount any excess shall be blotted with sand or be removed.
- 3.2 **Tack Coat**
Bituminous tack coat shall be applied by means of pressure distributor or hand spray. The rate of applicant of emulsified asphalt shall be 0.3 to 0.5 liter per square meter on asphalt surface, and 0.4 to 0.6 liter per square meter on concrete surface, or as directed by the Employer's Representative. Care shall be taken that the application of bituminous material



is not in excess of specified amount. Traffic shall be kept off the tack coat at all times. Tack coat shall be sprayed only so far in advance on the surface course as will permit it to dry to tacky condition, before laying the hot-mix asphalt.

For transverse joints, sawed vertical face method shall be followed. After the layer is removed and the materials is ramped and compacted, the mat must be sawed before paving operation begins again. The location of the sawed face should be at least 25mm behind the point of tangency so that a true surface is available at the start. Material ahead of the sawed section is of course removed. Placing thin sand underneath the ramped section will make removal easier when paving operation is required.

Spreading and laying shall be done at the prescribed laying temperature of not less than 115 degrees Celsius as measured in the truck prior to dumping into the paver. Close coordination between the paving crew and the asphalt batching plant is essential in securing a satisfactory and uniform job.

3.3 Compaction

Rolling or compaction should start as soon as possible after the hot-mix has been sprayed. Rolling consist of three consecutive phases.

- a. Breakdown Rolling - Compact the material beyond the compaction imparted by the paver. This is the best accomplished with steel-wheeled roller. Vibratory or static-weight tandem rollers are recommended. Rolling should strat on the low side of the spread usually outer side of the lane being spread. When adjoining lanes are placed, the same rolling procedure should be followed to assure proper cross slope or super elevation are maintained but only after compaction of fresh mix at longitudinal joint with 6" to 8" of roller width. Rolling speed should not exceed 5km per hour.
- b. Intermediate Rolling
- c. Finish Rolling

IV. SYNTHETIC RUNNING TRACK SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 WORKS RELATED

- A. Contractor shall be responsible for all work pertaining to the synthetic track. Refer to attached drawings delineating the scope of work of the Track Supplier/Installer.
- B. Contractor shall furnish all labor, materials, tools and equipment necessary to install all synthetic track as indicated on the plans and as specified herein and other related specifications. The installation of all new materials shall be performed in strict accordance with the manufacturer's installation instructions and in accordance with all approved shop drawings.
- C. Contractor is to adhere to all applicable laws and provisions during the duration of their works.
- D. Contractor is to abide by all the necessary requirements and specifications of the international governing bodies to ensure the certification of the works.
- E. Contractor shall secure the certification of the synthetic track to achieve IAAF Class 2 certification - Construction Category III.
- F. Contractor shall supply and install the semi-permanent aluminum curb at the inner lane of the running track.



- G. Contractor shall provide maintenance of the completed synthetic track for the next three (3) years after its completion at the Contractor's own cost.
- H. Contractor shall install line markings and letterings compliant with IAAF standards.
- I. Contractor shall render close coordination and supervision works of the Base Constructor's works upon issuance of the Notice of Award and shall conduct regular site visits to be monitored by the Owner's representative.
- J. Contractor shall provide/issue a written eight (8) year warranty supported by a third party insured warranty policy from an "A" Rated Domestic insurance carrier.
- K. Contractor shall engage an International Installer/Consultant with experience in the construction of previously certified IAAF Class 2 fields.
- L. Contractor shall facilitate the testing of the system to comply with specified and all relevant requirements and secure its accreditation. It shall submit all written results and reports to the Owner.
- M. Contractor shall conduct a minimum of one site visit of the Base Constructor's works and submit the "Affidavit of Site Inspection" duly signed and notarized during the Bidding Process.
- N. Contractor shall comply with the Environmental Corporate Responsibility as further stipulated in Part 3.8 of this document.

1.3 REFERENCE STANDARDS

- A. IAAF/NCAA - Performance Specification for Synthetic-Surfaced Athletics Tracks (Outdoor), International Amateur Athletic Federation/ National Collegiate Athletic Association.
- B. IAAF Track and Field Facilities Manual - IAAF Requirements for Planning, Constructing, Equipping and Maintaining

1.4 SUBMITTALS DURING CONSTRUCTION PHASE

- A. Shop Drawings: Submit installation details and locations of the following:
 - 1. Layout, colors, widths, and dimensions of game lines. Allow Owner to review at least 2 weeks prior to application.
 - 2. Details of other facilities such as steeplechase layout and construction details, installation and connection details of semi-permanent aluminum curb, and all installation related to the track oval completion.
- B. Samples for Verification: For each type, color, and pattern of synthetic track surfacing indicated, 6-inch square samples of same thickness and material indicated for the Work.
 - 1. Game-Line and Marker-Paint Samples: Include sample sets showing game-line and marker-paint colors applied to floor coverings.
- C. Product Certification:
 - 1. Submit manufacturer's certification that products and materials comply with requirements of the specifications.
 - 2. Submit results indicating compliance with Reference Standards.



3. Submit Certificate of Importation and copy of Bill of Lading from the point of origin to the delivery point (Philippine Science High School - Zamboanga Peninsula Region Campus) or any approved equivalent document for each product component of the system.
- D. Warranties: Submit warranty and ensure that forms have been completed in Owner's name and registered with approved Supplier/Installer.
- E. Prior to Final Acceptance, the Supplier/Installer shall submit to the Owner:
 1. Three (3) copies of maintenance Manuals, which will include all necessary instructions for the proper care and preventive maintenance of the track system, including painting and markings.
 2. Project Record Documents: Record actual locations of seams, drains or other pertinent information.
 3. Warranty: Submit Warranty and ensure that forms have been completed in Owner's name and registered with Supplier/Installer and Insurance Carrier. Submit information conformity that 3rd Party Insurance Policy, non-cancelable and pre-paid, is in effect covering this installation, and underwritten by an A Rated Insurance Carrier. Insurance carrier must confirm that the policy is in force and premiums paid.
- F. Submit a copy of all relevant test results indicating compliance with Reference Standards.
- G. Prior to the issuance of the Notice to Proceed, the Track Supplier/Installer is to submit a written "Certification of Acceptance of the Base Construction" to ensure that the base preparation works are completed as per the Track Manufacturer's specification and conditions.

1.5 QUALITY ASSURANCE

- A. Contractor shall meet the following criteria:
 1. Must provide competent workmen skilled in this specific type of running track installation. Technicians must have installed this type of system on at least one installation in the past five (5) years.
 2. The designed Supervisory Personnel on the project must be certified, in writing, by the track Manufacturer as competent in the installation of this material. Supervisory Personnel must have installed this type of system on at least one (1) installation in the past five (5) years.
 3. The Manufacturer shall have a representative visit the site to certify, in writing, the installation and Warranty compliance.
- B. Conduct Pre-Installation Conference at Project site to review requirements for substrates and for preparation by other trades.
- C. Prior to the beginning of installation, the installer of the synthetic track shall inspect the sub-base. The Installer will accept the sub-base in writing when the base constructor provides test result for compaction, planarity and permeability that are in compliance with the synthetic track manufacturer's recommendations.
- D. Track system shall have been independently tested to drain 6"-7" per hour through system and out laterally.



- E. Testing shall be performed in the presence of the Architect and Owner's representative prior to final completion.
- F. The Procuring Entity reserves the right to reject and/or refuse acceptance of any or all aspects of the synthetic track installation if it fails to meet the requirements of this specification section.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing Manufacturer's labels indicating brand name and directions for storing.
- B. Store materials to prevent deterioration.

1.7 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents:
 - 1. Track Surfacing: Furnish full-width rolls of not less than 1.5 percent additional material of each type, color, and pattern of surfacing material installed.

1.8 WARRANTY

- A. Special Warranty: Supplier/Installer's standard form in which they agree to repair or replace components of synthetic running track surfacing that fail in materials or workmanship within specified warranty period. Warranty guarantees usability and playability of synthetic running track surfacing for its intended uses.
 - 1. Correct defective Work within Eight (8) years from project completion.
 - 2. Failures include, but are not limited to, the following: Deterioration of surface and other materials beyond normal weathering.
 - 3. Warranty Period: Eight (8) years from project completion.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Supplier/Installer for synthetic track products shall meet or exceed the requirements listed in Part 1.6 and Part 2.2.

2.2 PRODUCT SPECIFICATION

The following product specifications are within the scope of works of the Contractor:



A. Synthetic Track

System	IAAF-certified running track surface product - Sandwich Type for athletic tracks and professional training facility
Area Coverage	300-meter track with six lanes and standard long and triple jump
Thickness and Quantity	Minimum of 13mm approx. on 13kg/sq.m. as per Supplier's recommendation
Surface Texture	Non-porous granular finish as per Supplier's recommendation
Color	Maroon (as per Owner's approval)
Top Layer	Minimum of 3mm thickness; Polyurethane and EPDM (Ethylene Propylene Diene Monomer granules) Strew-in, approximately sieve 1-4mm as per Supplier's recommendation
Base Layer	Minimum of 10mm thickness; Polyurethane and black SBR granule, approximately sieve 1-4mm as per Supplier's recommendation
Asphalt Substrate	Dense grade asphalt Thickness: 70mm minimum
Base Course	Thickness: 150mm minimum Sieve size 0-40mm Field Density Test (FDT) Compaction rate: 95% or higher
Spike Resistance	Class 1 (DIN 18035 pt 6)
Burning Characteristics	Class 1 (DIN 51960)

B. Sub-layer Composition (Order as per upper layer to lower layer)

1. The track surface i.e., asphalt substrate, shall not vary from planned cross slope by more than +/- 0.1% with a maximum lateral slope outside to inside of 1%.
2. Maximum slope of 0.1% in any running direction.
3. The finished asphalt shall not vary under a 10' straight edge more than 1/8".

2.3 SYNTHETIC RUNNING TRACK SURFACING SYSTEMS

- A. Synthetic Track Surfacing: Synthetic surfacing of manufacturer's standard thickness as required for overall thickness indicated.
- B. Substitutions will not be considered unless published literature is provided that verifies that the proposed substitution meets all requirements of this specification and is suitable for intended use.

C. Accessories:

1. Game-Line and Marker Paint: Complete system including primer, if any, compatible with synthetic track surfacing material and recommended in writing by synthetic track surfacing and paint manufacturers for use indicated.
2. Provide minimum of two coats of paint as per recommendations of IAAF.
3. Paint numbers 30 inches high by 42 inch lanes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
- B. Verify that in-ground track and field equipment and fixtures are installed.
- C. Proceed with installation only after unsatisfactory conditions of the base works have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of floor coverings.
- B. Protect surfaces adjacent to track surfacing operations.
- C. Asphalt Substrates: Cure and not less than 28 days.
 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 2. Adhesion Testing: Perform tests recommended in writing by manufacturer. Test cured asphalt and provide documentation that volatiles and latent asphalt content are within limits defined by manufacturer. Proceed with installation only after substrates pass testing.
- D. Obtain written approval from manufacturer's technical representative indicating that asphalt base is suitable for installation of the track surfacing.

3.3 INSTALLATION OF SYNTHETIC RUNNING TRACK

- A. Comply with manufacturer's written installation instructions.
- B. Substrate Tolerances:
 1. Planarity: Not to exceed ¼-inch in 10 feet, non-cumulative.
 2. Levelness: Not to exceed 0.1 percent in running direction.
 3. Concrete curbs: Ensure that tops of elevations of continuous concrete curbs are at constant elevation.
- C. Make substrate repairs and minor planarity corrections as recommended by manufacturer.



- D. Install track surface that achieves track surfacing performance and physical dimensions within tolerances.

3.4 GAME LINES AND MARKERS

- A. Provide IAAF standard markings for the following track and field events applicable to a 300-meter track:
 1. 100 meters, once direction on home straight
 2. 200 meters, all in lanes, one turn
 3. 100 meter hurdles, one direction on home straight
 4. 110 meter hurdles, one direction on home straight
 5. 300 meter hurdles, all in lanes
 6. Common Finish Line
 7. Lane Numbers, prior to common finish line, facing timing camera
 8. Relay Exchange Zones
 9. Starting Lines with event names
 10. Break lines for distance events at entry of back and main straights
- B. Do not apply marking paint until layout, colors, and placement are approved by the Procuring Entity's representative.

3.5 TOLERANCES

- A. Slopes:
 1. Track oval:
 - a. Running Direction and Lateral Slope: 1.0 percent maximum
 2. High Jump: 1.0 percent maximum, downwards to the cross bar
 3. Run ups: Same as track oval unless located in High Jump area

3.6 FIELD QUALITY CONTROL

- A. Layout: Employ registered surveyor to document compliance of in-place Work with the Contract Documents and referenced standards.
- B. Submit reports

3.7 CLEANING AND PROTECTING

- A. Leave surfacing clean and free of surface defects
- B. Protect installed surfacing from damage during construction activities

PART 4 - IAAF SPECIFIC REQUIREMENTS

- In accordance to the Scope of Works that the project is to achieve IAAF Class 2 - Category III Certification.
- The IAAF Track and Field Facilities Manual and its requirements are part of the Specification.

