Draft Environmental Impact Assessment

F-25-001 | UW-Oshkosh Baseball Field Improvements
450 Josslyn St, Oshkosh WI

Prepared for:

University of Wisconsin System
June 23, 2026

Ingenuity, Integrity, and Intelligence.

Draft Environmental Impact Assessment

UW-Oshkosh Baseball Field Improvements
Project #F-25-001

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I. Description of Proposed Action

A. Title of Proposal

UWO Baseball Tiedemann Field Improvements
UWSA Project # F-25-001

B. Location

Address: 450 Josslyn St, Oshkosh, WI 54902
County: Winnebago County
PLSS: Northwest ¼ of the Northwest ¼ of Section 23, Township 18N, Range 16E

C. Project: Define Proposed Action

1. Description

The UW-Oshkosh baseball field is in the southeast portion of the University of Wisconsin-Oshkosh Athletics Complex. The project proposes to replace the existing grass/dirt baseball field with an artificial turf system supported by an improved subgrade and drainage. Construction includes removal of existing soil and sod, installation of drainage infrastructure, and placement of turf as well as infield and warning track materials. New ballfield lighting and an updated scoreboard will also be installed.

2. Purpose and Need

The UWO Baseball Field Improvements Project will address long-standing deficiencies at the Tiedemann Field baseball facility. The replacement of the playing surface will ensure reliable field conditions, enhanced athlete safety, and reduced maintenance demands. The existing baseball field experiences chronic drainage failures, including standing water, erosion at the warning track, and uneven playing conditions that render the field unusable after rainfall events. Additionally, the outfield has settled significantly relative to the infield, exacerbating safety risks and generating maintenance challenges. Conversion of the natural grass surface to an engineered turf system with integrated drainage resolves these issues and aligns with NCAA/WIAA field performance standards, as the field is intended to be used daily during baseball season for practices and competitions.

Field upgrades will also benefit the wider community, as it will help the field to be more suitable for additional use by local teams, youth programs, and regional tournaments. Currently, there is periodic use during the off-season depending on field conditions, though summer or event-based use is limited due to field durability constraints. Rain events and subsequent unplayable conditions lead to further logistical issues such as canceled practices, rescheduled games, or the need to relocate off-site. Low surface durability of the existing field limits the overall frequency of use and restricts programming opportunities for other activities. The local climate and weather patterns also limit field use in early spring and late fall, shortening the overall useful season. The field does not have any lighting, limiting evening practices and games and reducing opportunities for student and community attendance. Adding field lighting and modern scoreboard allows for day and evening use, increasing the suitability for hosting a wider variety of events, improving the student-athlete experience and creating a more active, visible gathering space on campus.

Upgrades to the field and associated increase in reliability and usable days is anticipated to have several economic benefits, such as lower annual maintenance costs and better predictability of ongoing maintenance budget, improved program value and institutional competitiveness for recruitment, and could potentially enable new revenue streams (i.e. events, extended seasons, or rentals).

D. Estimated Cost and Funding Source

The total project cost is estimated at $3,000,000 provided by donor funds.

E. Time Schedule

Construction is expected to begin in October 2026 with completion in 2027.

A/E Selection	February 2026
Bid Posting	August 2026
Bid Opening	September 2026
Construction Starts	October 2026
Substantial Completion	Summer 2027

II. Existing Environment

A. Physical

1. Land Use

The project site is currently utilized as a baseball field with grass planting in part of the infield diamond and outfield. The field consists of above ground dugouts and adjacent Alumni Stadium, which provides spectator seating. The adjacent uses in the sports complex include a softball complex, football stadium, and track. The primary users of Tiedemann Field include UW-Oshkosh varsity baseball program for games, practices, and recruiting; club and recreational sports as overflow or as shared use when conditions allow; camps, clinics, and youth programs periodically, and for informal student recreational use when available. Site location, aerial image, and photographs are included in Appendix A.

2. Soils and Topography

Soils in the proposed project area were reviewed using the USDA Web Soil Survey, which provides soil data and information produced by the National Cooperative Soil Survey. The soil map is included in Appendix C. The planned project area has one soil type:

- Udorthents (2035A) - a type of soil classification that represents areas that have been disturbed by filling or grading. At the project site, this soil has 0-3 percent slopes and is somewhat poorly drained with high runoff.

The project area is generally flat with elevation of approximately 750 feet. Refer to Appendix C for a soils report.

3. Surface Water, Groundwater, and Geology

The Fox River is located less than 0.2 mi east from the edge of the project site, Lake Butte des Morts is located 1.3 mi to the northwest, and Lake Winnebago is approximately 1.8 miles to the southeast. Campbell Creek Marsh is located immediately south of the subject area and is a WDNR designated Wetland Class Area that drains into the Fox River via Campbell Creek. The elevation of the inlet is 748 ft. The site is located in the Lake Butte Des Mortes watershed.

Groundwater elevation at the site was estimated to be 745 ft to 749 ft elevation based on the Giles Engineering Geotechnical report prepared in 2024. The report mentions that the site appears to be subject to variable perched groundwater conditions, and that water may be present in higher permeability fill materials at the site, above the lower permeability native soil. During the April 2026 Site Investigation by Ayres Associates, water was encountered at one foot below ground surface in a hand-augered boring on the west side of the outfield.

Bedrock geology at the project site is Ordovician Sinnipee Group dolostones (carbonates) with some shale and sandy dolostones. Well construction reports from the area note limestone present at a depth of 20 to 30 ft in this area. The Wisconsin Department of Natural Resources (WDNR) has established a “Special Well Casing Depth Area” for all of Winnebago County due to naturally occurring arsenic contamination at shallower depths in the carbonate aquifer.

4. Wetlands and Floodplains

The WDNR Surface Water Data Viewer provides web-mapping tools for the state’s surface water and wetland resources. A wetlands map was generated for the general vicinity of the site. The map shows that there are no mapped wetlands within the project area. Wetland class areas are located immediately to the south of the ballfield. Refer to Appendix C for the WDNR wetland map.

The online Federal Emergency Management Agency (FEMA) Flood Map Service Center was utilized to generate a local map to review the flooding potential for the project area. The map indicates that the project site is not located within a flood zone. The project area is located in a zone denoted an area of minimal flood hazard. Refer to Appendix C for the floodplain map of the site.

B. Biological

1. Flora

Winnebago county is located in the Southeast Glacial Plains Ecological Landscape (WDNR, 2015). Wetlands encompass approximately 14.5% of the landscape and consist of emergent/wet meadow, forested, and shrub/scrub wetlands. This ecological landscape is also comprised of northern and central hardwood forests, lowland hardwood forests, and oak-hickory forests. One hundred and nine vascular plant species located within the Southeast Glacial Plains Ecological Landscape are on the Wisconsin Natural Heritage Working List. Of these vascular plants, ten species are listed as Wisconsin Endangered, 28 are listed as Wisconsin Threatened, and 71 are listed as Wisconsin Special Concern. There are six globally rare species located within the entire Southeast Glacial Plains Ecological Landscape, two of which are listed as U.S. Threatened (prairie bush-clover and prairie white-fringed orchid).

2. Fauna

Approximately 131 species of rare birds, herptiles, mammals, fishes, and invertebrates inhabit the Southeast Glacial Plains Ecological Landscape (WDNR, 2015). However, as an urban developed area with manicured landscaping, the project area does not provide significant natural habitat for fauna.

3. Endangered Resources Review

Ayres submitted an Endangered Resources Preliminary Assessment to WDNR on May 13, 2026 for information on threatened, endangered, and special concern species that may potentially be in the general area of the project or may be impacted by the project. The WDNR preliminary review found that the project area is covered by the Broad Incidental Take Permit/Authorization for No/Low Impact Activities provided that specified follow-up actions are implemented. As such, a formal review letter is not needed, and implementing the follow up actions ensures compliance with state and/or federal endangered species laws. The follow-up actions needed include:

1. Determination if there is suitable habitat for the Rusty Patched Bumble Bee, as the project area is in a high potential zone for the species. It was determined that the entire project area is not suitable habitat for the Rusty Patched Bumble Bee. The project area's compacted soils and lack of leaf litter make for unsuitable overwintering habitat. The frequently mowed turf grass is unsuitable foraging and nesting habitat.

2. Erosion and runoff prevention measures during the project to avoid potential impacts to aquatic species, as outlined in WDNR storm water construction site standards. These may include a silt fence, erosion mat, and others as project construction conditions warrant.

The Endangered Resources Preliminary Assessment form is in Appendix D.

C. Social

Existing social aspects of the area are presented as context to the project and the social profile of potential beneficiaries or parties impacted by the project.

1. City of Oshkosh and Winnebago County

Table 1 provides population data for Winnebago County and the City of Oshkosh. The most recent US Census estimates indicate a very small population decline in the City of Oshkosh (approximately 44 fewer people). Winnebago County population estimates indicate a small population increase (0.8%), but still less than the population increase for Wisconsin over the same time period (2.1%).

Table 1: Population changes over time for Oshkosh, Winnebago County, and Wisconsin

	US Census population estimate 2015-2019	US Census population estimate 2020-2024	Numeric change	Percent change
City of Oshkosh	66,773	66,729	-44	-0.07%
Winnebago County	170,411	171,769	1,358	0.8%
Wisconsin	5,790,716	5,914,872	124,156	2.1%

Source: US Census Bureau

The Wisconsin Department of Administration Demographic Services Center projects a population decline for most counties in Wisconsin between 2030 and 2050. For Winnebago County, the population is anticipated to decrease 1-2%. The City of Oshkosh population change over the same time period is projected to also decrease 5-6%.

2. UW-Oshkosh Campus

University of Wisconsin – Oshkosh was founded in 1871 and is now the third largest university in Wisconsin, spanning 171 acres along the Fox River. The campus annual enrollment is around 14,000 students, including approximately 1000 graduate students. UW-Oshkosh is a major regional anchor institution, serving as both a key employer and a center for cultural, educational, and community activity in the Fox Valley. The university provides benefit to the community through academic programming to support regional workforce needs, a variety of public cultural events, youth camps, wellness programming, and recreation access; and also engagement with local school, nonprofit, and industry partners. The campus also engages in many sustainable initiatives such as native prairie and woodland plantings and has been designated a Monarch Way Station and Tree Campus USA.

UW-Oshkosh is deliberate about increasing the emphasis on health, wellness, and applied learning programs that rely on quality athletic and outdoor facilities, as well as balancing community access with Division III athletics and student engagement. Alumni Stadium, where UW-Oshkosh baseball games take place, can seat up to 1,500 spectators. It was constructed in 1971 and remodeled in 2006. The UW-Oshkosh baseball program has a rich history and tradition of competitive success and developing collegiate athletes who advance to major league baseball. It is anticipated that improvements to Tiedemann Field would have multiplier effects across student life, visibility, and campus vibrancy.

3. Employment and Income

Table 2 provides employment and income data for residents of the City of Oshkosh, Winnebago County, Wisconsin, and the United States. The unemployment rate in Winnebago County and City of Oshkosh are slightly lower than the average for the state and nation. Local and Wisconsin median income estimates are higher than the national average.

Table 2: Employment and income data, December 2025

	Total employment	Unemployment rate	Median income
City of Oshkosh	33,761	2.7%	$103,600
Winnebago County	89,320	2.7%	$103,600
Wisconsin	3,028,663	3.0%	$104,800
United States	163,720,000	4.1%	$83,730

Sources: City of Oshkosh Chamber of Commerce, State of Wisconsin DWD, Department of Housing and Urban Development

4. Neighborhoods

The project site is an athletic field within the campus athletics complex, which also includes a practice ballfield, track, and football stadium. The sports complex property is surrounded by a marina, marsh, childcare, and single-family and multi-family residences. The nearest residential complex is approximately 625 feet to the east. Most of the nearby single-family residences were constructed between the 1940s and 1970s.

5. Important Social Features and Buildings Near the Project Site

The project site is within the Oshkosh Athletics Complex and is surrounded by key athletic facilities that contribute to student life and engagement, as well as community spectator opportunities. The complex provides high quality track and field facilities, including a nine-lane Olympic-quality outdoor track and adjacent warm-up track, and a combined football and soccer synthetic turf field. The stadium overlooking these facilities seats 9,800 spectators. It hosts as many as 120 events/year and has historically hosted the USA Track and Field Masters, USA Track and Field Regional Youth Meet, NCAA Div III Outdoor Track and Field Championships, and Badger State Games. This concentration creates a hub of athletic and community activity.

D. Economic

Expenses for the existing natural grass field include turf repair, reseeding, patching, irrigation and field preparation, repairs due to waterlogging after weather events, and associated staff time to oversee these activities. Annual maintenance costs may average between $40,000 and $80,000 and are highly dependent on weather conditions during seasons of high-frequency use. These upkeep costs also do not address the systemic issues of poor drainage. Poor field conditions may lead to lost revenue opportunities due to cancellations and limited scheduling, higher lifecycle costs due to reactive rather than proactive maintenance, low dependability for successfully hosting revenue-producing events, and competitive disadvantages in student-athlete recruitment.

E. Other

1. Historical and Archaeological

A search of the Wisconsin Historical Preservation Database (WHPD) was conducted on May 12, 2026, to determine the presence of historical and archaeological sites potentially affected by the proposed project. The WHPD is maintained by the Wisconsin Historical Society (WHS) and consists of four data sources including:

1. Archaeological Report Inventory (ARI): contains summaries of archaeological investigations at archaeological and burial sites.

2. Archaeological Sites Inventory (ASI): contains information about archaeological and burial sites, unmarked cemeteries, marked cemeteries, and cultural sites.

3. Architecture and History Inventory (AHI): contains basic information on historic buildings, structures, and objects.

4. National Register (NR) of Historic Places: contains information for historic properties listed in the State and National Register of Historic Places

There are multiple AHI, ARI, or ASI sites in the surrounding area of the proposed project area, but no sites listed on the WHPD are located within the area of potential effect. There are two sites within relative proximity of the proposed project area. UW-Oshkosh Stadium is approximately 450 feet west/northwest of the area of potential effect. It is not eligible for the National Register of Historic Places and is not immediately adjacent to the area of potential effect. Zion Lutheran Church, 400 N. Sawyer St., is approximately 1100 ft to the west of the area of potential effect and is listed as potentially eligible for NRHP. Due to the distance between these structures and the project area, no impacts to the structures themselves are anticipated.

Known archaeological sites were not identified within the area of potential effect for the proposed project. Due to terms of the WHPD user agreement, database printouts are maintained in the project file and are not attached to this report.

2. Environmental Contamination

Environmental databases documenting sites known or likely to be contaminated with petroleum products or hazardous substances were searched on May 13, 2026. These databases included:

1. Wisconsin Department of Natural Resources Remediation and Redevelopment Sites Map (WDNR)
2. Wisconsin Department of Agriculture, Trade, and Consumer Protection Storage Tank Database (DATCP)

3. United States Environmental Protection Agency NEPAssist, including:

    a. Hazardous waste: Hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo) includes an inventory of all generators, transporters, treaters, storers, and disposers of hazardous waste that are required to provide information about their activities.

    b. Air pollution: The air pollution data (ICIS-AIR) contains compliance and permit data for stationary sources of air pollution (such as electric power plants, steel mills, factories, and universities) regulated by EPA, state, and local air pollution agencies. The information in ICIS-AIR is used by the states to prepare State Implementation Plans (SIPs) and to track the compliance status of point sources with various regulatory programs under the Clean Air Act.

    c. Water dischargers: As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating sources, such as municipal and industrial wastewater treatment facilities, that discharge pollutants into waters of the United States. EPA tracks water discharge permits through the Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) databases, which include information on when a permit was issued and when it expires, how much the company is permitted to discharge, and the actual monitoring data showing what the company has discharged.

    d. Toxic releases: The Toxics Release Inventory (TRI) contains information on toxic chemical releases and waste management activities reported annually by certain industries as well as federal facilities. The database also contains links to compliance and enforcement information.

    e. Superfund: The Superfund Enterprise Management System (SEMS) provides information regarding sites under the Comprehensive Environmental Response, Compensation, and Liability Act -- otherwise known as CERCLA or Superfund. CERCLA provides a Federal "Superfund" to locate, investigate, and clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Sites on the National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. Sites on the Superfund Alternative Approach (SAA) list use the same investigation and cleanup process and standards that are used for sites listed on the NPL. Currently, sites with SAA agreements are a small subset of all Superfund cleanup agreements.

The UW-Oshkosh Titan Sports Complex is currently an open WDNR Remediation and Redevelopment site #02-71-596361 following discovery of soil contamination during the baseball field site investigation in 2024. Sampling of shallow subsurface materials in April 2026 encountered historical fill materials and indicated the upper two feet of soil were contaminated with various metals and polycyclic aromatic hydrocarbons (PAHs). The levels of this contamination were generally high enough to pose a risk to contaminate groundwater through infiltration of rain or irrigation water. Some of the samples across the field had metal or PAH contamination levels above health-based standards for direct human contact.

There is also an open remediation site to the east across North Campbell Road at ZL Commercial Parcel (BRRTS # 02-71-578686). Soil contamination at this site also includes historical fill materials up to nine feet below ground consisting of asphalt, wood, glass, rubber, foundry sand, slag, and possibly petroleum-contaminated soil.

WDNR records indicate two closed underground storage tanks on the adjacent property across North Campbell Rd at Lakeside Marina. DATCP records indicate two active aboveground storage tanks at two adjacent properties to the east across North Campbell Road, at Lakeside Marina (902 Taft Ave) and 490 North Campbell Rd.

A search in the NEPA assist database identified the adjacent property at Lakeside Marina as a very small quantity generator of hazardous waste including ignitable waste and nonhalogenated solvents. Additionally, the University of Wisconsin-Oshkosh was identified as a small quantity generator of a variety of hazardous waste types. It should be noted that waste generator status does not imply environmental releases of hazardous waste.

III. Proposed Environmental Change

A. Manipulation of Terrestrial Resources

Construction access will occur on the northeast corner of the field and include the construction of a temporary tracking pad leading up to the outfield fence. The entire ballfield space, bounded by the outfield fence, bleachers, and dugouts will be excavated to an average depth of 1.11 ft. In areas where utilities need to be accessed, excavation will occur to a depth of four to five feet. Site construction plans are included in Appendix B.

B. Manipulation of Aquatic Resources

The proposed project does not involve the direct manipulation of aquatic resources. Drainage from the field will be tied into existing storm water utilities near the bleachers behind home plate.

C. Structures

Changes to existing structures include some modification to the fence around the field. In addition, field lighting and a modern scoreboard will be installed.

D. Other

Existing irrigation facilities will be removed as well as some portions of the storm sewer utility and portions of the chain link fence. The field will be unavailable for use during construction.

IV. Probable Adverse and Beneficial Impacts

A. Physical Impacts

An adverse, though temporary impact is that the field will not be usable during construction, which is scheduled to begin in Fall 2026. There may be an impact to vehicular traffic on North Campbell Road, where construction equipment will enter and exit the site. Construction activities have the potential to increase stormwater runoff and erosion of soil materials. Erosion control practices, such as a silt fence and erosion mat will be in place to minimize runoff and erosion.

A beneficial impact of the conversion to a synthetic turf field is that it eliminates the need for ongoing maintenance activities for turf grass such as mowing, fertilizer, reseeding, irrigation, and aeration. In addition, the field will have more durability and drainage capacity following rain events.

B. Biological Impacts

A probable benefit of the field upgrade is reduced application of fertilizer and water use needed to manage the natural grass field. An adverse impact of synthetic turf is the reduced carbon absorption, natural cooling, and air quality benefits associated with natural grass. Replacement of the natural grass also reduces biodiversity and habitat for bugs, worms, and other microorganisms, though the effect is limited to the bounds of the project area.

C. Socioeconomic Impacts

1. Social

A beneficial impact is that the improved drainage and resilience during periods of high usage is projected to increase the number of usable days for the field and provide greater scheduling flexibility. Increased durability and reliability can reduce the need to cancel, reschedule, or relocate practices or competitions. This will also permit use by other clubs, organizations, camps, and events during and outside of the baseball season.

The perceived novelty, improved appearance, and modernization of the facilities may increase desirability for hosting events or competitions and may benefit player recruitment or retention efforts. Probable adverse social impacts to the project include loss of traditional natural-grass baseball aesthetic and the noise generated by excavation and construction activities, though residential areas are not immediately adjacent to the field. There may also be social impacts for people living near or passing by the complex from lighting and noise later in the evening, depending on how and when field events are scheduled.

Related to player safety, there are potential adverse and beneficial impacts. Synthetic fields provide an even playing surface free from divots that can pose a trip hazard. At the same time, synthetic turf exhibits a higher surface temperature on hot days which can increase the field temperature and risk of heat-related illnesses for players. Synthetic turf can also increase the risk of abrasions and burns from players sliding on the ground. Research is inconclusive as to whether synthetic turf may lead to more traction injuries (injuries from a cleat getting stuck in the fibers, for example). Synthetic fields tend to lose the ability to attenuate shock over time unless properly maintained. There is also a chance for dust/particulate exposure for players in close contact or making impact with the ground surface depending on the type of infill particles and plastic fibers used.

2. Economic

A beneficial impact of the turf conversion is a reduction in costs currently expended on watering, mowing, reseeding, applying fertilizer, repairs, and other natural grass maintenance activities. There is still an economic impact due to synthetic turf maintenance (sweeping, dragging, replenishing infill, removing debris, sanitation), but this cost is more predictable year to year and not dependent on seasonal weather patterns. A more reliable and durable field may also provide opportunities for hosting revenue-generating events.

Probable adverse economic impacts include the high upfront installation cost, costs to replace the field at the end of its useful life (8 to 12 years on average), and cost to dispose of the worn turf materials.

D. Other (Archaeological, Historical, etc.)

1. Historical and Archaeological

As described in Section II.E.1., the area of potential effect does not overlap or interfere with any sites listed on the Wisconsin Historical Preservation Database.

A UW Historic Preservation Assessment Form and supporting documentation was submitted to the UW System Administration Principal University Planner on May 15, 2026 for review by the State Historic Preservation Office for archaeological and historical sites that may be impacted by the proposed project. As of the date on this report, there was no response from the Historic Preservation Officer.

2. Environmental Contamination

As described in Section II.E.2. above, the project area is an area with known soil contamination. A benefit of field reconstruction is the excavation and proper disposal of the existing soil materials, which have been found to be contaminated with debris, metals, and other compounds that are common for historical fill materials. They also pose a health risk for direct contact and for contaminating groundwater. Excavation and disposal of these materials will follow WDNR guidelines and the materials management plan. Additional benefits include reduced fertilizer or chemical application to the field and emissions from mowing or aerating activities.

Compared to natural grass, there is a higher potential for migration of chemical compounds or microplastics from the infill materials and turf fibers into the field drainage system, which will be tied into the municipal sewer system. To reduce any potential impact to the environment and help prevent particulates from being transported through the drainage network, geotextile fabric (a non-woven polypropylene material suitable for filtration) will be installed as part of the drain system (Appx B).

3. Utilities

In the short term, there will be a commitment of energy resources to manufacture the materials and construct the project, including fossil fuel consumption used by construction vehicles and equipment. Energy that will be consumed includes fuel and electricity used to run construction equipment and to operate construction material manufacturing plants. Other short-term electrical needs may consist of lighting, compressors, and tools. Long-term, there will be an increase in drainage to the sewer utility and increase in electrical use for the newly installed field lighting and scoreboard.

A benefit to the project is that the artificial turf will no longer need to be served by water utilities and as a result, existing irrigation utilities for the grass field will be removed. Similarly, the artificial turf will not need to be mowed, reducing the use of electricity and/or fossil fuels previously consumed by mowing operations.

4. Parking and Transportation

The project may have a short-term adverse impact on traffic such as an increased presence of heavy trucks as construction equipment is brought onto the site and the existing turf materials are hauled off site. Parking may be impacted at and around the Athletic Complex if there is a higher demand for access to the field due to increased usage or large events after construction is complete.

V. Probable Adverse Impacts That Cannot Be Avoided

Short-term probable adverse impacts that cannot be avoided are related to construction activities and commitment of energy resources. Construction impacts include noise and dust emissions, vibration, increase in heavy vehicle traffic, disruption to field availability, and possible discharge of suspended solids in storm water related to excavation and/or stockpiling activities. It is possible to mitigate these adverse impacts through noise and erosion reduction measures, as well as best management practices for dust suppression and stormwater.

Long-term unavoidable adverse impacts include reduction in biodiversity, natural cooling, and carbon absorption properties of natural grass; loss of traditional natural grass baseball experience; increased risk of environmental loading of synthetic compounds or particles from natural breakdown of the artificial surface; increased risk of player injury from heat, impact, or abrasion; and economic and environmental impacts to field replacement at the end of its useful life.

VI. Relationship Between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

As discussed in Section V, short-term construction activities will produce adverse effects that can be largely mitigated with planning and control measures but not entirely avoided. The long-term productivity is most enhanced by increasing the number of useable days for the field and availability for use by other groups and events. The field upgrade also increases the predictability of budgeted maintenance work and benefits the area by excavating and properly disposing of known contaminated soils in the shallow subsurface.

VII. Irreversible or Irretrievable Commitments of Resources If Action Is Implemented

A. Energy

There will be an irretrievable commitment of energy resources to construct the project, including fossil fuel consumption in the manufacturing of the synthetic field materials and by construction vehicles and equipment. Additional electrical needs may consist of construction area lighting, compressors, and tools.

Ongoing field maintenance will also result in a commitment of energy resources, though this is not expected to be more than energy resources committed as part of maintaining the existing field.

B. Archaeological and Historic Features or Sites

Per the research conducted on the Wisconsin Historical Society's WHPD and consultation with the UWSA HPO, no historic properties will be affected. Thus, there are no irreversible or irretrievable commitments with regard to archaeological or historic features or sites.

C. Other

The project requires an estimated financial commitment of $3 million to complete the project plus ongoing operation, utility, and maintenance expenses, and the expense of disposal and replacement at the end of the turf useful life.

VIII. Alternatives

Alternatives to the proposed project are described below.

No Action/Defer the Project: This alternative eliminates the reconstruction of the field. This alternative would mean that the ability to use the field would be subject to and limited by weather affecting field conditions. This alternative would also mean forfeiture of the $3 million donor funds earmarked for field improvements and a commitment to ongoing maintenance and repair activities currently undertaken at the ballfield as a natural grass field. Contaminated soil beneath the existing field would remain in place.

Other Design Alternatives: Design alternatives have been excluded from consideration under this EIA as they would not meet the intent of the donor funds contributed for this project.

IX. Evaluation

A. As a result of this action, is it likely that other events or actions will happen which may significantly affect the environment? (secondary effects)

There are no anticipated likely secondary effects due to the installation of the synthetic turf field that would significantly affect the environment.

B. Does the action alter the environment so a new physical, biological, or socioeconomic environment would exist? (new environmental effect)

As a reconstruction project, the proposed action does not significantly alter the intended use of the project area, as the site will remain dedicated to recreation with improved amenities. Replacing natural turf grass with synthetic turf does alter the physical and biological environment. Removing organic matter and topsoil and replacing with fill material and artificial turf changes the physical nature and biological properties of the field, removing habitat for invertebrate activity and other microbial processes that occur in the shallow subsurface. However, since the existing grass field is not ideal habitat for native flora or fauna, its loss is not expected to have a significant negative effect on the biological environment.

Research summarized by Ryan-Ndegwa et. Al (2024) indicated that artificial turf fields have been found to contain PAHs, heavy metals, rubber additives, and serve as a source of microplastics to the environment. Some, but not all, of these compounds were found to be bioaccessible (able to be absorbed by the human body). It should be noted that not all synthetic fields are constructed with the same materials, and as such, synthetic fields do not uniformly pose the same potential risk to human health or the environment. The research summary did not definitively identify evidence of human health risk from the use of artificial turf in typical real-world use scenarios. Research on artificial turf fibers in aquatic systems have identified turf fibers in river and ocean systems (de Haan et al., 2023). The replacement turf for this project may serve as a new source of microplastics to the municipal sewer system, though there are design measures in place to mitigate this potential impact (discussed in Section IV.D.2)

The synthetic field may alter the socioeconomic environment by increasing usable days, making the field potentially available for use by additional groups or for a longer period of time during the year, and by increasing the desirability to utilize the field because of the novelty and upgraded condition after installation.

C. Are there existing environmental features which would be affected by the proposed action scarce, either locally or statewide? (geographically scarce)

The existing environmental features are turf grass and other plant species that occur within the grass. These features are common throughout the area and their loss in the field area will not have an overall negative effect on the ecology of the region. Similarly, assessment of known historic and archaeological sites near the proposed project area suggests that no historic or archaeological sites will be affected.

D. Does the action and its effects require a decision which would result in influencing future decisions? Is the decision precedent setting?

The high use-tolerance of synthetic turf over natural grass could have an overall effect on future decisions regarding activities on grass areas. The high cost of disposal and replacement of the field at the end of its useful life will influence future capital planning and/or fundraising decisions. However, this decision is not considered to be precedent-setting.

E. Are there concerns which indicate a serious controversy? (highly controversial)

No serious controversy has been identified. There is a broad societal move towards mindfully using and consuming natural/organic products over processed, artificial products that rely on petrochemicals. However, some synthetics may be produced using recycled materials, providing added environmental benefit. There is the chance that community members and the student body would be critical of using synthetic surfaces instead of natural grass stemming from concerns related to aesthetics, player safety, and potential toxicity to field users or the natural environment.

F. Does the action conflict with official agency plans or with any local, state or national policy? Is the action inconsistent with long-range plans or policies?

This action does not conflict with official agency plans or any local, state, or national policies. In addition, local and state government officials are invited to participate in the public review process during the preparation of this EIA.

G. While the action itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment? (cumulative impacts)

The complete transition from natural grass fields to synthetic fields university-wide would reduce campus-wide biodiversity, which would not be considered significant, and increased risk of heat island effect, which could be significant at the campus scale. However, associated impacts would not be considered significant at the neighborhood or larger scales.

H. Will the action modify or destroy any historical, scientific or archaeological site?

There is no known historical, scientific, or archaeological component that is present at the existing field site.

I. Is the action reversible? Will it commit a resource for the foreseeable future? Does it foreclose future options?

This conversion of the field from natural grass to synthetic grass is reversible, and the proposed action does not exclude future options for use of the site. However, upgrading the field as described will require the consumption of resources and energy, which are not recoverable.

J. Will the action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns? (social-cultural impacts)

No direct or indirect impacts to ethnic or cultural groups are anticipated. The proposed action will provide a social benefit for those at the campus and visitors to campus by providing better facilities for recreation. It could alter social patterns by providing a more reliable asset that can accommodate a higher usage rate.

K. Other

Other factors warranting evaluation under this section were not identified during the preparation of this EIA.

X. List of Agencies, Groups and Individuals Contacted Regarding This Project

The following parties were consulted during the preparation of this EIA:

- University of Wisconsin System
- University of Wisconsin – Oshkosh
- Wisconsin Department of Natural Resources – National Heritage Inventory public portal
- Wisconsin Historical Society (State Historic Preservation Office)

XI. Recommendation

The Campus Environmental Affairs Coordinator will review the Draft EIA and comments received during the Draft EIA public comment period to determine if a recommendation is needed to elevate this project to a Type I level as an Environmental Impact Statement (EIS).

RECOMMENDATION	(to be completed by institution WEPA Coordinator only)

O **EIS Not Required**

Analysis of the expected impact of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion therefore, an environmental impact statement is not required before the board undertakes this action.

O Major and Significant Action: **PREPARE EIS**

Additional factors, if any, affecting the evaluator's recommendation:

CERTIFIED TO BE IN COMPLIANCE WITH WEPA - Public Notice Completed (include a copy of the public notice for permanent record)	
Institution WEPA Coordinator	Date:

This decision is not final until approved by the appropriate Director.

Regent Resolution 2508 11/06/81

XII. References

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Appendix A

Site Location and Photographs

Site Topo Map

Environmental Impact Assessment · UW-Oshkosh Titan Athletic Complex

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
Project 23-1948.40 • 6.2.2026

Aerial Map

Environmental Impact Assessment · UW-Oshkosh Titan Athletic Complex

AYRES ASSOCIATES
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Eau Claire, WI 54701
Project 23-1948.40 • 6.2.2026

Field from NE outfield corner, looking south

Field from NE outfield corner looking west

From bleachers looking east to construction access

From bleachers, looking SE to scoreboard

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Eau Claire, WI 54701
Project 23-1948.40 • 6.2.2026

From bleachers looking south to batting cage

Looking north to main bleachers

Outside first base line, looking south

Outside first base line looking north

From SW corner of outfield, looking east to scoreboard

From SE corner looking NW to football stadium

From SW corner looking W to softball complex

Campbell Creek Marsh, south of field

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701

From Josslyn street, looking E towards baseball field

Childcare center, appx 700 ft SW of field

Zion Lutheran Church, appx 1100 ft west of field

Lakeside Marina, appx 1000 ft NE of field

From main bleachers looking W across track, football

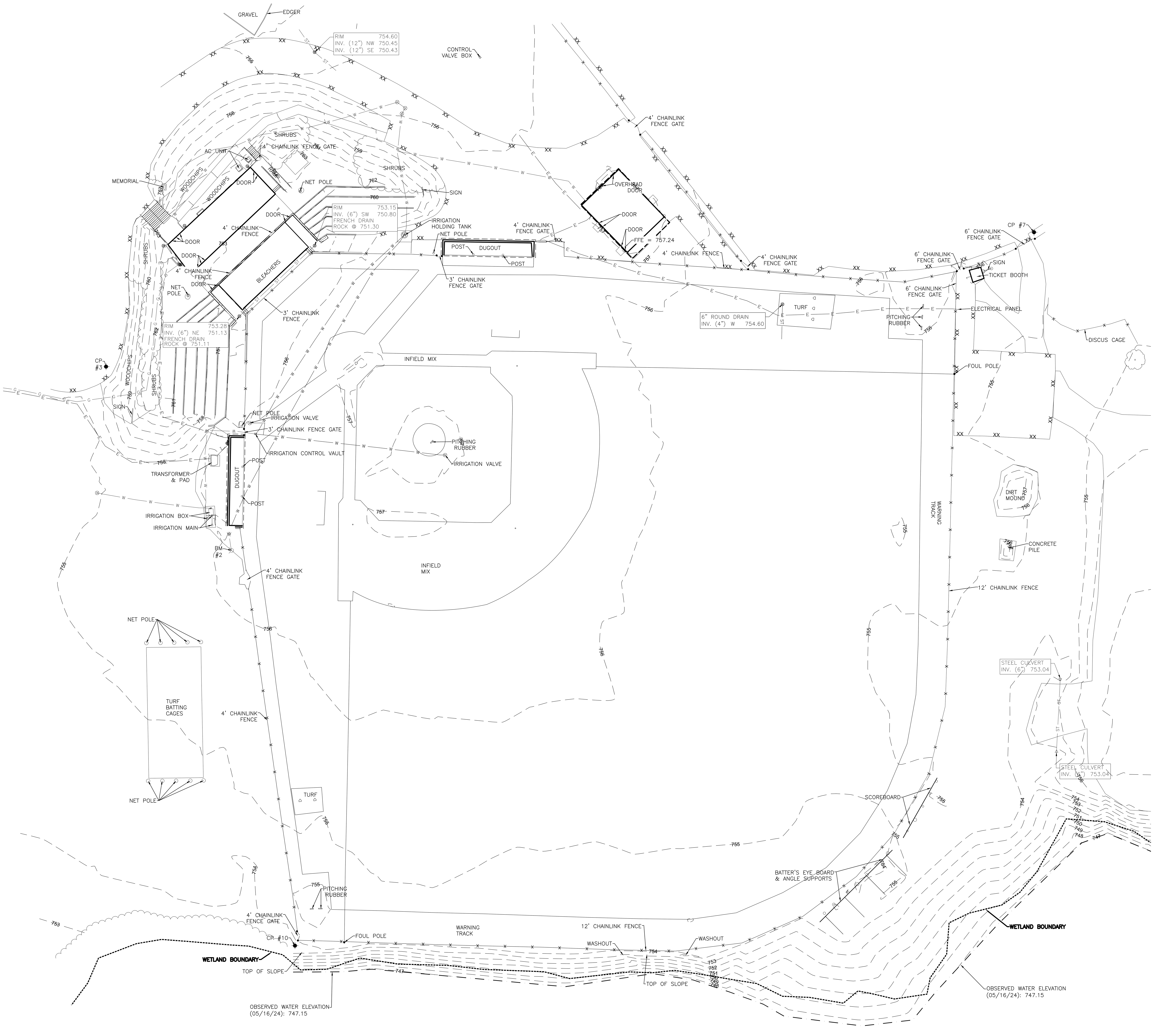
From main bleachers looking N to practice track

From main bleachers looking E down third base line

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
Project 23-1948.40 • 6.2.2026

Appendix B

Preliminary Project Plans



LEGEND

- LIGHT POLE
- POWER POLE
- GUY
- ELECTRIC METER
- ELECTRICAL BOX
- ELECTRIC OUTLETS
- GAS METER
- GAS VALVE
- TELEPHONE PEDESTAL
- TELEPHONE MANHOLE
- SANITARY MANHOLE
- WATER MANHOLE
- STORM MANHOLE
- UTILITY MANHOLE
- CATCH BASIN
- CATCH BASIN
- CATCH BASIN
- WATER VALVE
- HYDRANT
- IRRIGATION BOX
- MAILBOX
- BOLLARD
- FENCE
- SANITARY SEWER
- STORM SEWER
- POWER OVERHEAD
- BURIED ELECTRIC
- BURIED GAS
- BURIED TELEPHONE
- WATERMAIN
- FIBER OPTICS
- EDGE OF BITUMINOUS
- VENT PIPE
- BIRDHOUSE
- BASKETBALL HOOP
- FLAG POLE
- SIGN
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH/SHRUB
- CONTOUR LINE
- PLAY EQUIPMENT
- VERTICAL PIPE
- BENCH
- ROCKS
- CONTROL POINT
- 3/4" IRON BAR FOUND
- 1" IRON PIPE FOUND
- 1-1/2" IRON PIPE FOUND
- 2" IRON PIPE FOUND
- CHISELED 'X' FOUND

UNDERGROUND UTILITIES

THESE RECORD DRAWINGS HAVE BEEN PREPARED IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE SURVEYOR AND ARCHITECT WILL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.

SOME UTILITIES HAVE BEEN LOCATED BY MAPS PROVIDED BY OTHERS-LOCATIONS ARE APPROXIMATE.

FIELD VERIFY SANITARY AND STORM SEWER PIPE SIZES AND THEIR LOCATIONS.

UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE BASED IN PART ON MARKINGS BY DIGGERS HOTLINE. (TICKET# [#])

DESCRIPTION

LOCATED IN [DIR.]1/4 OF [DIR.]1/4] SECTION [#], TOWNSHIP [#] [DIR.], RANGE [#] [DIR.], [VILLAGE/TOWN/CITY], [COUNTY], WISCONSIN.

PROJECT SITE ADDRESS:
XXXX ABC ROAD (OR SAY 400 BLOCK OF ROAD)
CITY, STATE, ZIP

BENCHMARKS

ELEVATIONS BASED ON NAVD 88 USING WISGEOID 18:

BENCHMARK# [#]
[DESCRIPTION- START AT THE SMALL DETAIL AND WORK OUT]
{EXAMPLE; TOP OF FIRE HYDRANT BURY BOLT LOCATED ON THE EAST SIDE OF BLANK ROAD ± 50FT NORTH OF APARTMENT MAILBOXES.

ELEVATION: [#.00]

SURVEY CONTROL POINTS

COORDINATE SYSTEM BASED ON: NAD83 (2011) WITH xxxxx COUNTY COORDINATES USING WISCORS

CP #1 - [DESC.]
N: [#]
E: [#]
Z: [#]

CP #2 - [DESC.]
N: [#]
E: [#]
Z: [#]

CP #3 - [DESC.]
N: [#]
E: [#]
Z: [#]

SURVEY NOTES

#1:

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920.498.1200
AA #23-1948.40

Consultant:
RETTLER corporation
3317 Business Park Drive, Stevens Point, WI 54482
Telephone: 715 - 341 - 2633, Fax: 715 - 341 - 0431
email: info @ rettler.com, website: www.rettler.com

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title:
EXISTING SITE PLAN

Revisions:

No.	Date:	Description:

Graphic Scale	0' 5' 10' 20' 30'
UWSA Number	F-25-001
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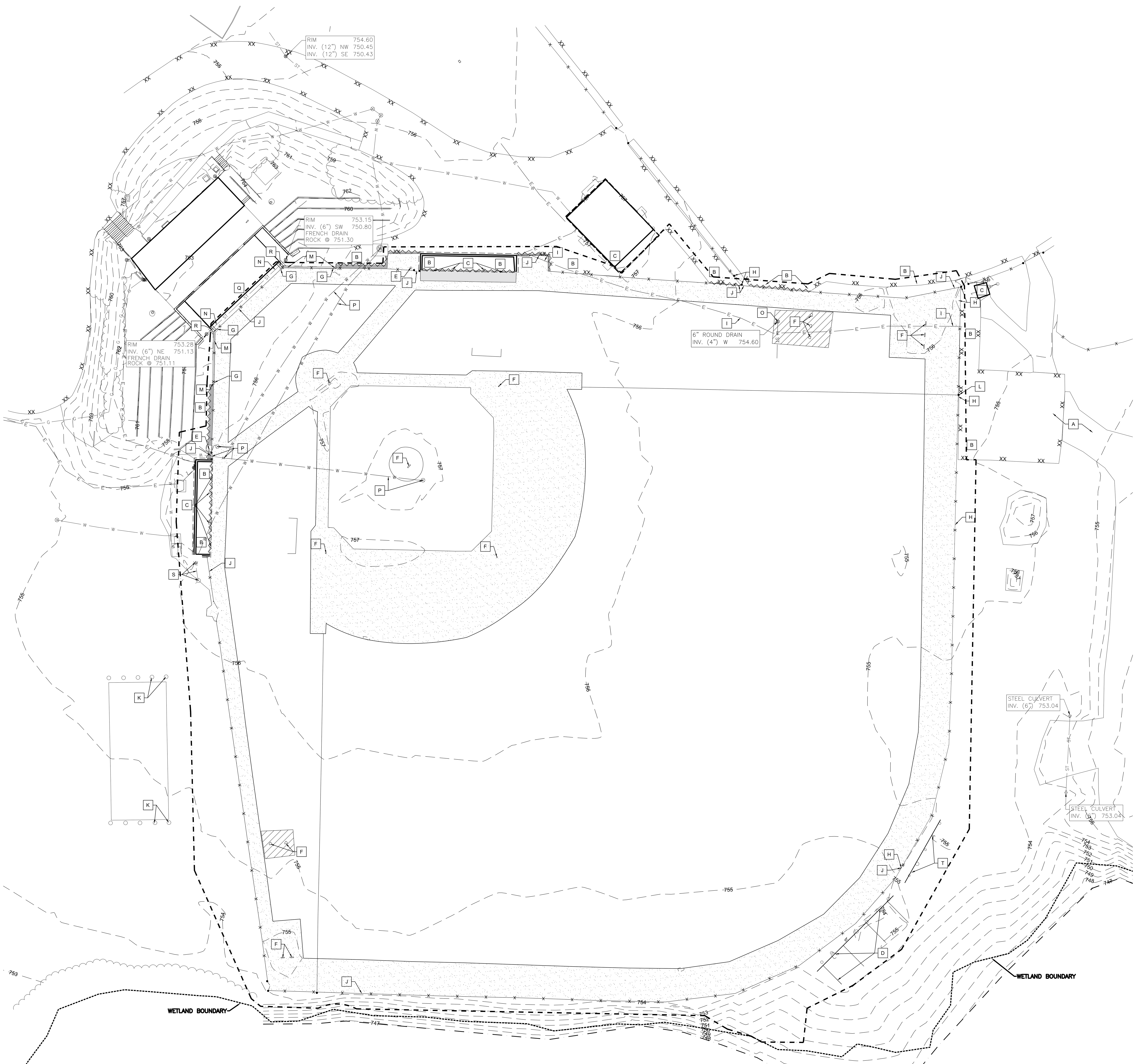
Date Issued	05/15/2026
Sheet Number	C100



GENERAL NOTES

1. CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO START OF DEMOLITION/CONSTRUCTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING PRIVATE UTILITIES PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
3. COORDINATE SITE CONSTRUCTION ACCESS WITH OWNER PRIOR TO START OF CONSTRUCTION.
4. STRIP ONLY THE TOPSOIL WITHIN THE PROJECT LIMITS THAT WILL BE DISTURBED DURING CONSTRUCTION.
5. REMOVE ONLY THE EXISTING TREES AND VEGETATION WITHIN THE PROJECT LIMITS THAT INHIBIT CONSTRUCTION.
6. REMOVE ANY ABANDONED UTILITIES WITHIN THE PROJECT LIMITS THAT INHIBIT CONSTRUCTION.
7. ALL CONTRACTORS SUBMITTING A BID SHALL VISIT THE SITE AND REVIEW THE EXISTING CONDITIONS PRIOR TO THE BID DATE. ANY DISCREPANCIES FOUND ARE TO BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT FOR REVIEW IMMEDIATELY UPON DISCOVERY.
8. ALL ITEMS TO BE REMOVED AND DISPOSED OF SHALL BE TAKEN FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
9. VERIFY ALL REMOVAL AND SALVAGE ITEMS WITH THE OWNER.
10. ALL ITEMS TO BE SALVAGED SHALL BE DELIVERED TO THE OWNER. COORDINATE DELIVERY WITH OWNER.
11. ALL AREAS AND SITE FEATURES DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO THE ORIGINAL CONDITION.
12. ALL SITE ENTITIES OUTSIDE THE PROJECT LIMIT LINE SHALL NOT BE DISTURBED.

DEMOLITION LEGEND

REMOVE EXISTING SYNTHETIC TURF & BASE STONE

REMOVE EXISTING CONCRETE & BASE AGGREGATE

REMOVE EXISTING ASPHALT & BASE AGGREGATE

REMOVE EXISTING INFIELD & WARNING TRACK MATERIAL

SAW CUT EXISTING PAVEMENT

LIMITS OF CONSTRUCTION

DEMOLITION KEYNOTES

A SITE CONSTRUCTION ACCESS

B MAINTAIN AND PROTECT EXISTING HARD SURFACE

C MAINTAIN AND PROTECT EXISTING BUILDING / DUGOUT AND FOUNDATIONS

D MAINTAIN AND PROTECT BATTERS EYE BOARD AND FOUNDATIONS

E MAINTAIN AND PROTECT EXISTING NET POLE, FOUNDATIONS, AND NETTING SYSTEM

F REMOVE EXISTING BASEBALL FIELD EQUIPMENT
CONFIRM ITEMS TO BE SALVAGED WITH OWNER

G MAINTAIN AND PROTECT EXISTING RETAINING WALL

H MAINTAIN AND PROTECT EXISTING CHAIN LINK FENCING AND GATES.
WHERE EXISTING FENCE IS ADJACENT TO PROPOSED SYNTHETIC TURF:
- REMOVE AND SALVAGE BOTTOM FENCE RAIL. REINSTALL BOTTOM FENCE RAIL AFTER SYNTHETIC TURF HAS BEEN INSTALLED
- FOLD UP BOTTOM OF FENCE FABRIC AND WINDSCREEN AS NECESSARY FOR SYNTHETIC TURF INSTALLATION. REINSTALL AFTER SYNTHETIC TURF HAS BEEN INSTALLED.

I EXISTING ELECTRICAL UTILITY - SEE ELECTRICAL PLANS

J REMOVE EXISTING CHAIN LINK FENCING AND GATES

K MAINTAIN AND PROTECT EXISTING TURF AND BATTING CAGE

L CUT EXISTING FOUL POLE AT TOP RAIL OF EXISTING FENCE

M REMOVE EXISTING CHAIN LINK FENCING - CUT FENCE POSTS FLUSH WITH TOP OF WALL.
FILL AND GROUT POST HOLES

N MAINTAIN AND PROTECT EXISTING STORM SEWER UTILITY

O REMOVE EXISTING STORM SEWER UTILITY

P REMOVE / ABANDON ALL EXISTING IRRIGATION LINES, HEADS, VALVES, AND BOXES WITHIN FIELD
CAP IRRIGATION SERVICE AT EDGE OF FIELD

Q MAINTAIN AND PROTECT EXISTING BLEACHERS

R MAINTAIN AND PROTECT EXISTING STAIRS

S MAINTAIN AND PROTECT EXISTING WATER UTILITY

T MAINTAIN AND PROTECT EXISTING SCOREBOARD POSTS AND FOUNDATIONS
SEE ELECTRICAL PLANS FOR SCOREBOARD DEMOLITION DETAILS

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920.498.1200
AA #23-1948.40

Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title:
SITE DEMOLITION PLAN

Revisions:

No.	Date:	Description:

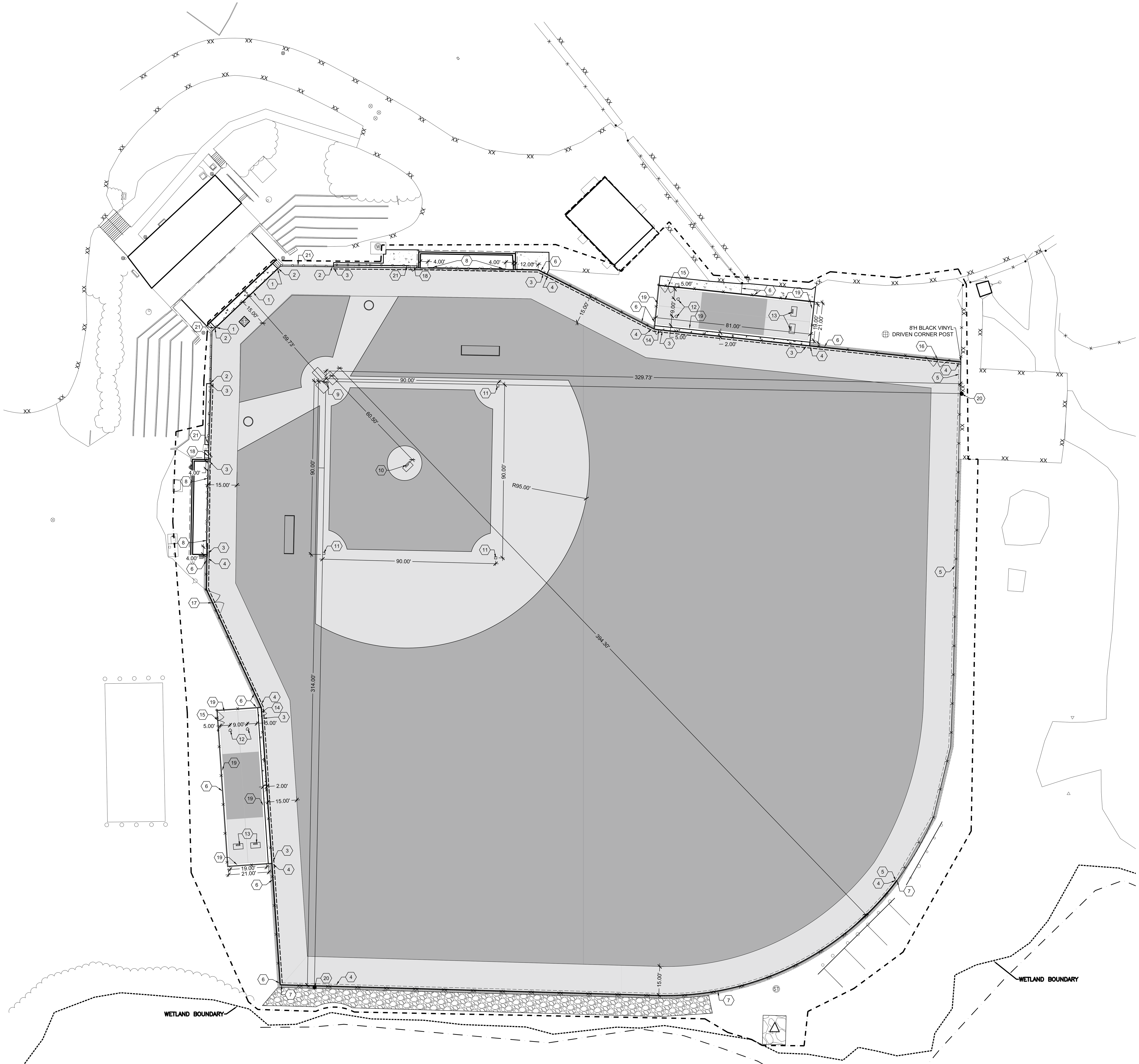
Graphic Scale 0' 5' 10' 20' 30'

UWSA Number F-25-001

Set Type SD

Date Issued 05/15/2026

Sheet Number C200



SITE LAYOUT - GENERAL NOTES

1. ALL PROPOSED DIMENSIONS ARE REFERENCED PARALLEL OR PERPENDICULAR TO THE PROPOSED FEATURES SHOWN.
2. GRADE, LINE, AND LEVEL SHALL BE REVIEWED IN THE FIELD BY THE PROJECT MANAGER.
3. ALL PAVED SURFACES SHALL MEET ADA REQUIREMENTS, CONTRACTOR TO REMOVE AND REPLACE ANY NON CONFORMING PAVEMENT.
4. SHOWN SYNTHETIC TURF FIELD STRIPING IS FOR REFERENCE ONLY. ALL NECESSARY FIELD MARKINGS SHALL BE INCLUDED TO MEET NCAA DIVISION III BASEBALL STANDARDS.

SITE LAYOUT - LEGEND

SYNTHETIC TURF ATHLETIC FIELD (INFIELD/WARNING TRACK AREAS)
- 1.5"H SYNTHETIC TURF W/ 1.25" INFILL (BY OTHERS)
- 2" FINISH DRAINAGE STONE
- 6" MIN. BASE DRAINAGE STONE
- TYPE SAS GEOTEXTILE FABRIC

SYNTHETIC TURF ATHLETIC FIELD (GRASS AREAS)
- 2"H SYNTHETIC TURF W/ 1.75" INFILL (BY OTHERS)
- 2" FINISH DRAINAGE STONE
- 6" MIN. BASE DRAINAGE STONE
- TYPE SAS GEOTEXTILE FABRIC

(CONFIRM HEIGHTS OF SYNTHETIC TURF & INFILL MATERIAL W/ TURF CONTRACTOR)

Item	Detail
5" CONCRETE W/ SYNTHETIC FIBER REINFORCEMENT 6" BASE AGGREGATE DENSE, ¾ INCH	1-2 C600
DOT LIGHT RIPRAP WITH TYPE R FABRIC	7 C603
DOT MEDIUM RIPRAP WITH TYPE HR FABRIC	7 C604
18" WIDE MAINTENANCE STRIP	5-6 C600
8'H BLACK VINYL CHAIN LINK FENCING	1-5 C601
12'H BLACK VINYL CHAIN LINK FENCING (POSTS SIZED FOR WINDSCREEN)	1-5 C601
42"H BLACK VINYL CHAIN LINK FENCING W/ BOTTOM RAIL AND RAIL PADDING	1-5 C601
INTEGRATED WALL PAD BACKSTOP W/ REAR WINDSCREEN ENCLOSURE & HARDWARE (SECURE NET TO TOP OF 36" WALL)	X C604
LIMITS OF CONSTRUCTION	

SITE LAYOUT - KEY NOTES

No.	Note	Detail
1	THICKENED EDGE CONCRETE CURB AND NAILER	3 C600
2	WALL-MOUNTED TREATED 2X4 NAILER BOARD	
3	12" x 12" CONCRETE CURB AND NAILER: NAILER FLUSH WITH TOP OF CURB (ADJACENT TO PAVEMENT)	4 C600
4	12" x 12" CONCRETE CURB AND NAILER: TURF WRAPPED OVER NAILER (ADJACENT TO GRASS)	5 C600
5	12" x 12" CONCRETE CURB AND NAILER: TURF WRAPPED OVER NAILER (ADJACENT TO EXISTING FENCE)	6 C600
6	8'H BLACK VINYL CHAIN LINK FENCING	1-5 C600
7	12'H BLACK VINYL CHAIN LINK FENCING (POSTS SIZED FOR WINDSCREEN - WINDSCREEN BY OTHERS)	1-5 C600
8	42"H BLACK VINYL CHAIN LINK FENCING W/ BOTTOM RAIL AND RAIL PADDING	1-5 C600
9	BATTER'S BOX FORMING SYSTEM	
10	PITCHING MOUND FORMING SYSTEM	
11	BASEBALL BASE WITH CONCRETE ANCHOR AND PLUGS	9 C601
12	HOME PLATE FORMING SYSTEM	
13	BASEBALL PITCHING MOUND AND PITCHING PLATE ANCHOR	
14	8'H x 4'W BLACK VINYL CHAIN LINK FENCE GATE	6 C601
15	8'H x 10'W BLACK VINYL CHAIN LINK FENCE GATE	7 C601
16	8'H x 12'W BLACK VINYL CHAIN LINK FENCE GATE	7 C601
17	8'H x 16'W BLACK VINYL CHAIN LINK FENCE GATE	7 C601
18	4'H x 4'W BLACK VINYL CHAIN LINK FENCE GATE - APPROXIMATE WIDTH OF GATE IS 4'. FIELD VERIFY. - COORDINATE WITH CONSTRUCTION MANAGER	
19	12" x 12" CONCRETE CURB AND NAILER: EXPOSED CURB (BULLPEN)	7-8 C600
20	30'H YELLOW BASEBALL FOUL POLE	
21	INTEGRATED WALL PAD BACKSTOP W/ REAR WINDSCREEN ENCLOSURE & HARDWARE (SECURE NET TO TOP OF 36" WALL)	

AYRES
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920.498.1200
AA #23-1948.40

Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title: SITE LAYOUT PLAN

Revisions:

No.	Date:	Description:

Graphic Scale: 0' 5' 10' 20' 30'

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Date Issued	05/15/2026
Sheet Number	C300

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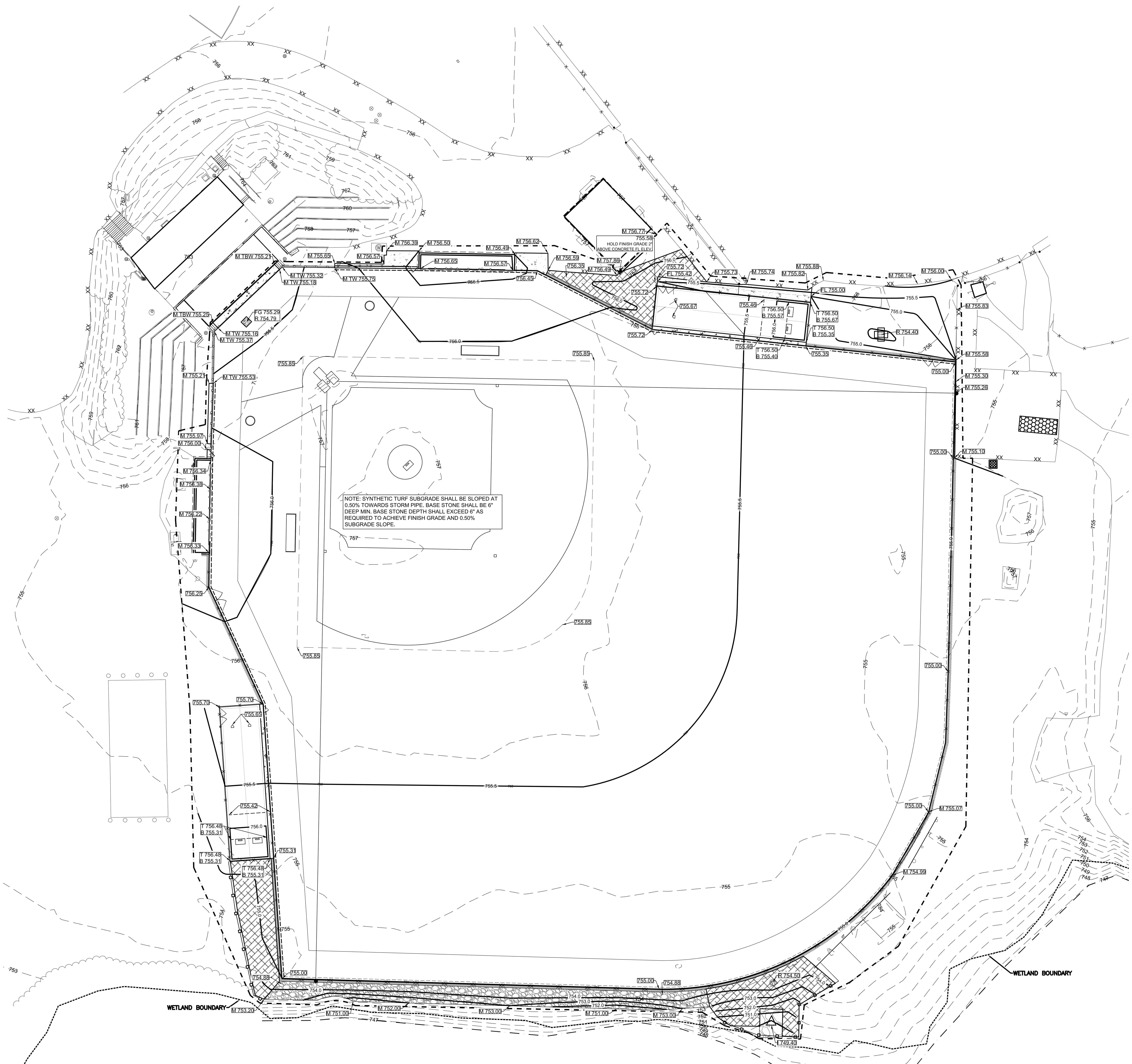

SITE GRADING AND EROSION CONTROL - GENERAL NOTES

1. GRADE, LINE, AND LEVEL TO BE REVIEWED IN THE FIELD BY THE PROJECT MANAGER.
2. FINISH GRADE (FG) IS THE TOP OF THE SYNTHETIC TURF INFILL.
3. THE CONTRACTOR SHALL NOTIFY THE LOCAL GOVERNMENT EROSION CONTROL INSPECTOR AT LEAST 2 DAYS PRIOR TO THE START OF SOIL DISTURBING ACTIVITIES.
4. THE SITE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL ELEMENTS IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES AND THE LOCAL GOVERNING AUTHORITIES REGULATIONS.
5. PLACE INLET PROTECTION UNDER THE PROPOSED AND EXISTING CATCH BASINS, MANHOLES, AND INLETS GRATES FOR THE DURATION OF CONSTRUCTION.
6. ALL ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE AS TO MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ANY ONE TIME. MAINTAIN EXISTING VEGETATION AS LONG AS POSSIBLE.
7. PLACE TEMPORARY SEED IF DISTURBED AREAS WILL NOT BE RESTORED IMMEDIATELY AFTER ROUGH GRADING. TEMPORARY SEED SHALL BE PLACED IN ACCORDANCE WITH SECTION 630 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
8. INSPECT ALL EROSION CONTROL ELEMENTS WEEKLY OR AFTER STORM EVENTS OF 1/2" OF RAIN OR GREATER AND DOCUMENT IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF NATURAL RESOURCES.
9. DISTURBED GROUND OUTSIDE OF THE EVERYDAY CONSTRUCTION AREA, INCLUDING SOIL STOCKPILES LEFT INACTIVE FOR MORE THAN 10 DAYS, SHALL AT A MINIMUM BE TEMPORARILY STABILIZED BY SEEDING/MULCHING OR OTHER METHODS APPROVED BY THE LOCAL GOVERNING AUTHORITY'S EROSION CONTROL INSPECTOR.
10. ALL OFF SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH DAY. FLUSHING SHALL NOT BE ALLOWED.
11. ALL SEDIMENT LADEN WATER PUMPED FROM THE SITE SHALL BE TREATED BY A TEMPORARY SEDIMENT BASIN OR BE FILTERED BY OTHER APPROVED MEANS. WATER SHALL NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE OR RECEIVING CHANNELS.
12. EROSION CONTROL DEVICES DESTROYED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE END OF THE WORK DAY.
13. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AT THE CONCLUSION OF CONSTRUCTION AFTER STABILIZATION OF DISTURBED SOIL HAS OCCURRED.
14. ALL WASTE AND UNUSED BUILDING MATERIALS SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
15. SEED / FERTILIZE / AND CRIMP MULCH ALL GENERAL LANDSCAPE AREAS DISTURBED DURING CONSTRUCTION IN ACCORDANCE WITH THE PROJECT MANUAL SPECIFICATIONS AND WITHIN 3 WORKING DAYS OF FINAL GRADING.
16. ALL EROSION CONTROL ELEMENTS SHALL REMAIN IN PLACE UNTIL A SUFFICIENT GROWTH OF GRASS IS ESTABLISHED IN ALL GENERAL LANDSCAPE AREAS, AND THEN REMOVED BY THE SITE CONTRACTOR.
17. IN THE CASE OF LATE SEASON AND WINTER CONSTRUCTION, RESTORATION/LANDSCAPING OF THE SITE SHALL OCCUR NO LATER THAN JUNE 1ST OF THE NEXT CONSTRUCTION SEASON. EROSION CONTROL MEASURES SHALL REMAIN INTACT UNTIL FINAL RESTORATION OF THE SITE IS COMPLETE. FABRIC INSIDE THE INLET AND CATCH BASIN GRATING SHALL BE REMOVED AS SOON AS FREEZING WEATHER OCCURS SO DRAINAGE IS NOT IMPAIRED THROUGHOUT THE WINTER MONTHS. ALL EROSION CONTROL PRACTICES REMOVED OR DAMAGED DUE TO WINTER WEATHER SHALL BE REPLACED IN THE SPRING IMMEDIATELY AFTER THE THAW.

SITE GRADING AND EROSION CONTROL - LEGEND

PROPOSED CONTOURS	766.0	
EXISTING CONTOURS	766	
PROPOSED SPOT ELEVATION	766.00	
MATCH EXISTING SPOT ELEVATION	M	
PROPOSED TOP OF CURB ELEVATION PROPOSED FINISH GRADE AT BOTTOM OF CURB	T B	
TOP OF WALL ELEVATION	TW	
TOP BACK OF WALL ELEVATION	TBW	
PROPOSED ENDWALL INVERT ELEVATION	I	
PROPOSED RIM ELEVATION	R	
CONCRETE FLUME FLOWLINE ELEVATION	FL	
TEMPORARY TRACKING PAD		1 / C603
CONCRETE WASHOUT AREA		2 / C603
INLET PROTECTION		3 / C603
SILT FENCE		5 / C603
EROSION MAT CLASS I TYPE A		4 / C603
SILT FENCE OUTLET		6 / C603
LIMITS OF CONSTRUCTION		

N

AYRES
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3317 Business Park Drive, Stevens Point, WI 54482
Telephone: 715 - 341 - 2633, Fax: 715 - 341 - 0431
email: info @ rettler.com, website: www.rettler.com

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title:
SITE GRADING & EROSION CONTROL PLAN

Revisions:

No.	Date:	Description:

Graphic Scale	0' 5' 10' 20' 30'
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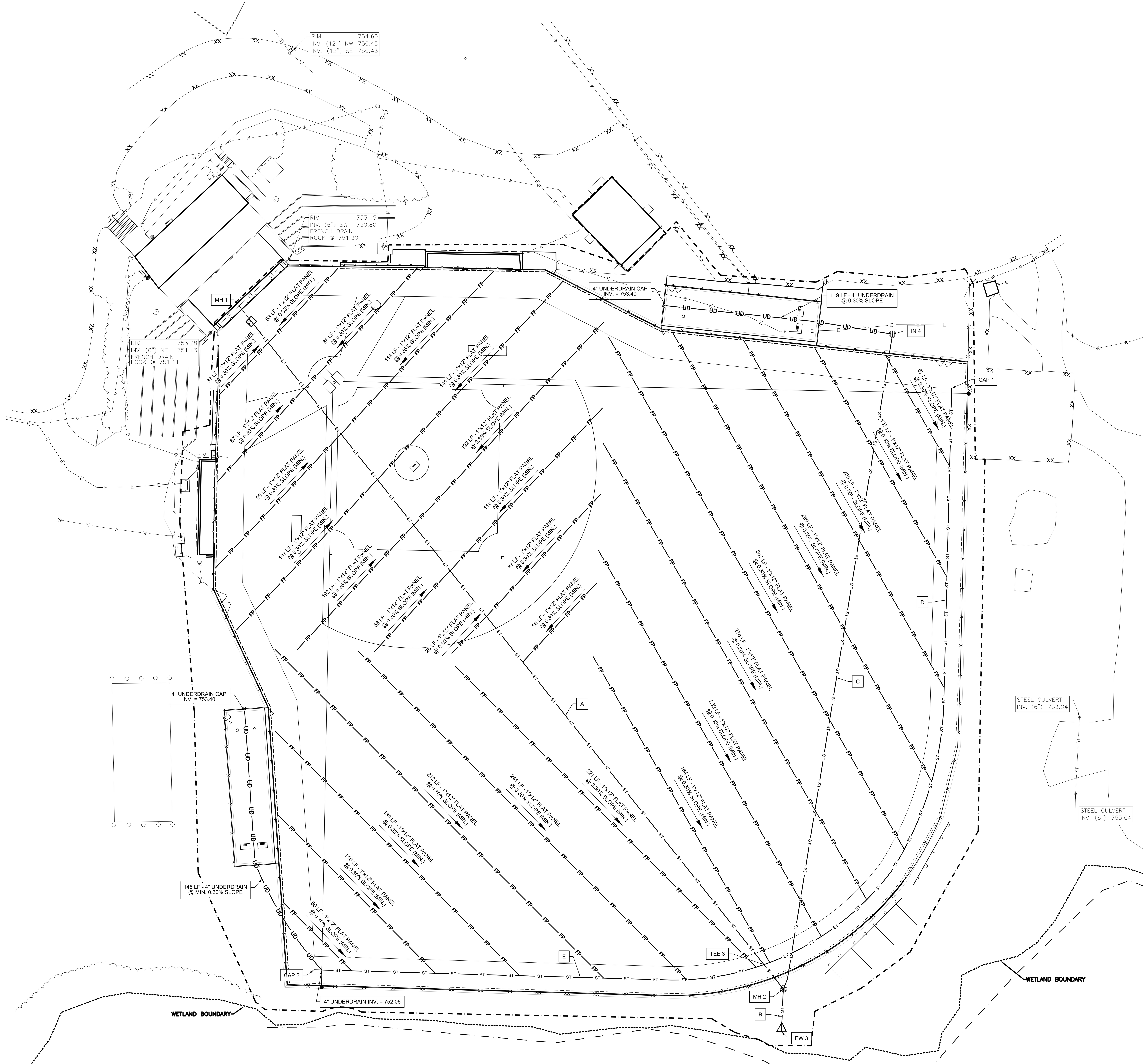

SITE UTILITY - GENERAL NOTES

1. ANY EXISTING UTILITIES NOT SHOWN ON THESE DOCUMENTS WHICH NEED TO BE REMOVED, RELOCATED AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED IN THE BID.
2. ANY EXISTING UTILITIES THAT ARE TO REMAIN BUT ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED IN KIND BY THE CONTRACTOR AND SHALL BE INCLUDED AS PART OF THE BASE BID.
3. SITE UTILITY CONTRACTOR SHALL VERIFY ALL EXISTING STORM SEWER RIM AND INVERT ELEVATIONS WHERE THE PROPOSED STORM SEWER IS DESIGNED TO CONNECT TO EXISTING STORM SEWER PRIOR TO CONSTRUCTION.
4. COORDINATE ALL UTILITY RELOCATION WITH THE PROPER UTILITY COMPANY.
5. ALL PAVEMENT DISTURBED BY PROPOSED UTILITIES SHALL BE RESTORED IN KIND BY THE CONTRACTOR AND SHALL BE INCLUDED AS PART OF THE BASE BID.
6. PROVIDE A COMPLETE TRACER WIRE SYSTEM ON ALL NON-METALLIC UTILITY PIPING SYSTEMS IN ACCORDANCE WITH THE REQUIREMENTS OF THE WISCONSIN PLUMBING CODE AND DETAILS CONTAINED IN THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. PROVIDE ACCESS TO TRACER WIRE IN ALL MANHOLES & INLETS. SPLICE TRACER WIRE AS NECESSARY.
7. PIPE LENGTHS INCLUDE THE RADIUS OF THE STRUCTURE.

SITE UTILITY - LEGEND

STORM PIPE	ST	1 / C604
1'x12" FLAT PANEL DRAIN W/ SOCK	FP	2 / C604
4" PERFORATED UNDERDRAIN	UD	
STORM STRUCTURE NUMBER	ST MH 1	
STORM PIPE ID	A	
STORM SEWER STRUCTURE	ST	3-6 / C604
LIMITS OF CONSTRUCTION		

STORM PIPE SCHEDULE

PIPE ID	FROM STRUCTURE	TO STRUCTURE	LENGTH	SLOPE	PIPE SIZE	PIPE MTL
A	MH 1	MH 2	444	0.30%	12	PERF. HDPE
B	MH 2	EW 3	22	1.81%	18	HDPE
C	IN 4	MH 2	346	0.50%	12	HDPE
D	CAP 1	TEE 3	340	0.30%	12	PERF. HDPE
E	CAP 2	TEE 3	235	0.30%	12	PERF. HDPE

STORM STRUCTURE SCHEDULE

MH 1

RIM 754.79
12" INV. (SE) 751.63
DEPTH 3.16
18" PVC BASIN
SOLID LID
24"X24"" TURF ACCESS BOX

MH 2

RIM 754.50
18" INV. (S) 749.80
12" INV. (NW) 750.30
12" INV. (NE) 750.30
DEPTH 4.70
48" CONCRETE STRUCTURE
NEENAH R-1689 W/ TYPE B LID

EW 3

18" INV. 749.40
18" METAL ENDWALL WITH TRASH GUARD
- SEE DETAIL 7/604

IN 4

RIM 754.40
12" INV. (SE) 752.03
4" INV. (NW) 753.03
DEPTH 2.57
18" PVC BASIN WITH STANDARD GRATE

CAP 1

12" INV. 751.37

CAP 2

12" INV. 751.06

TEE 3

12" INV. 750.35

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UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

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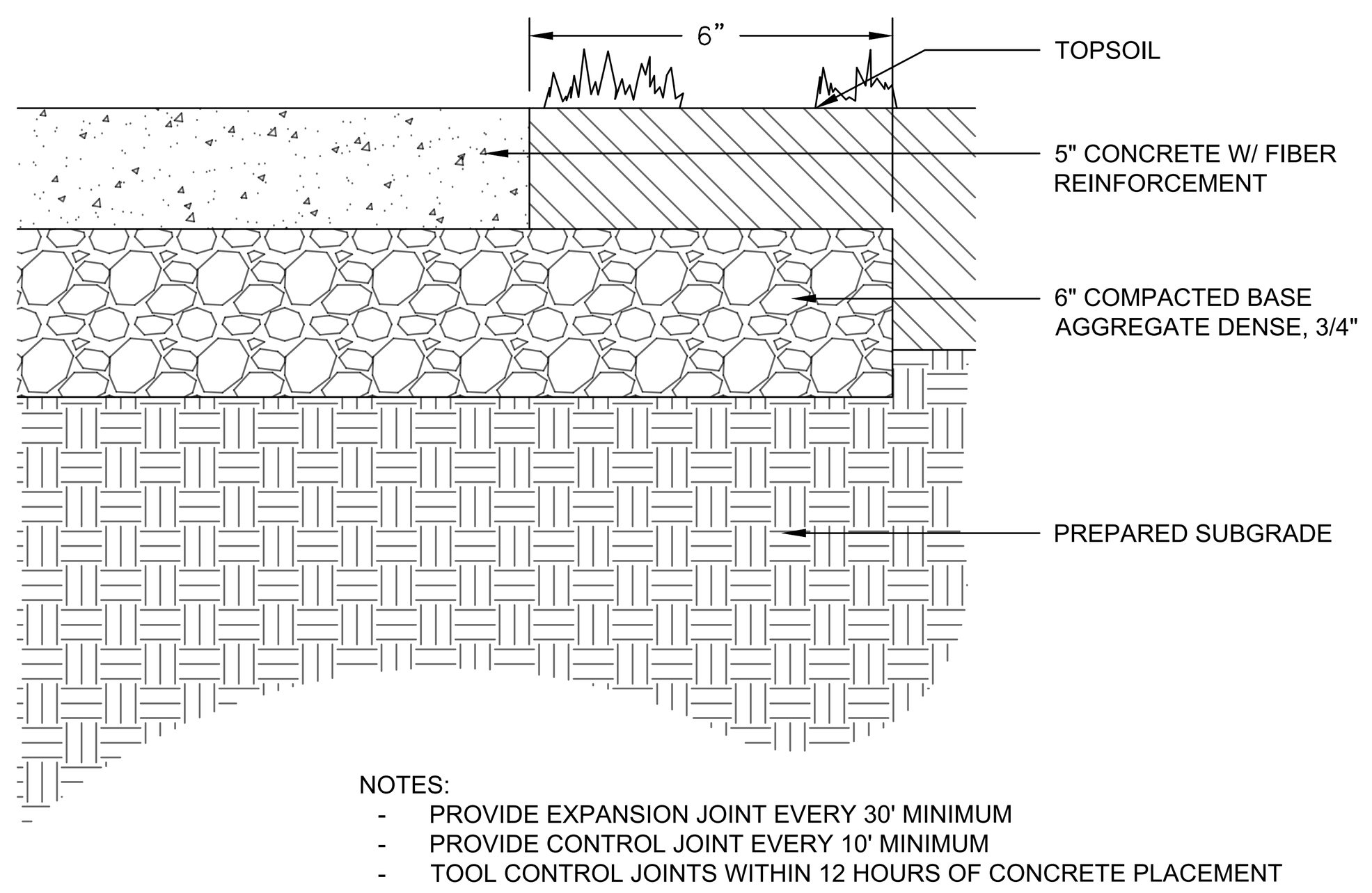
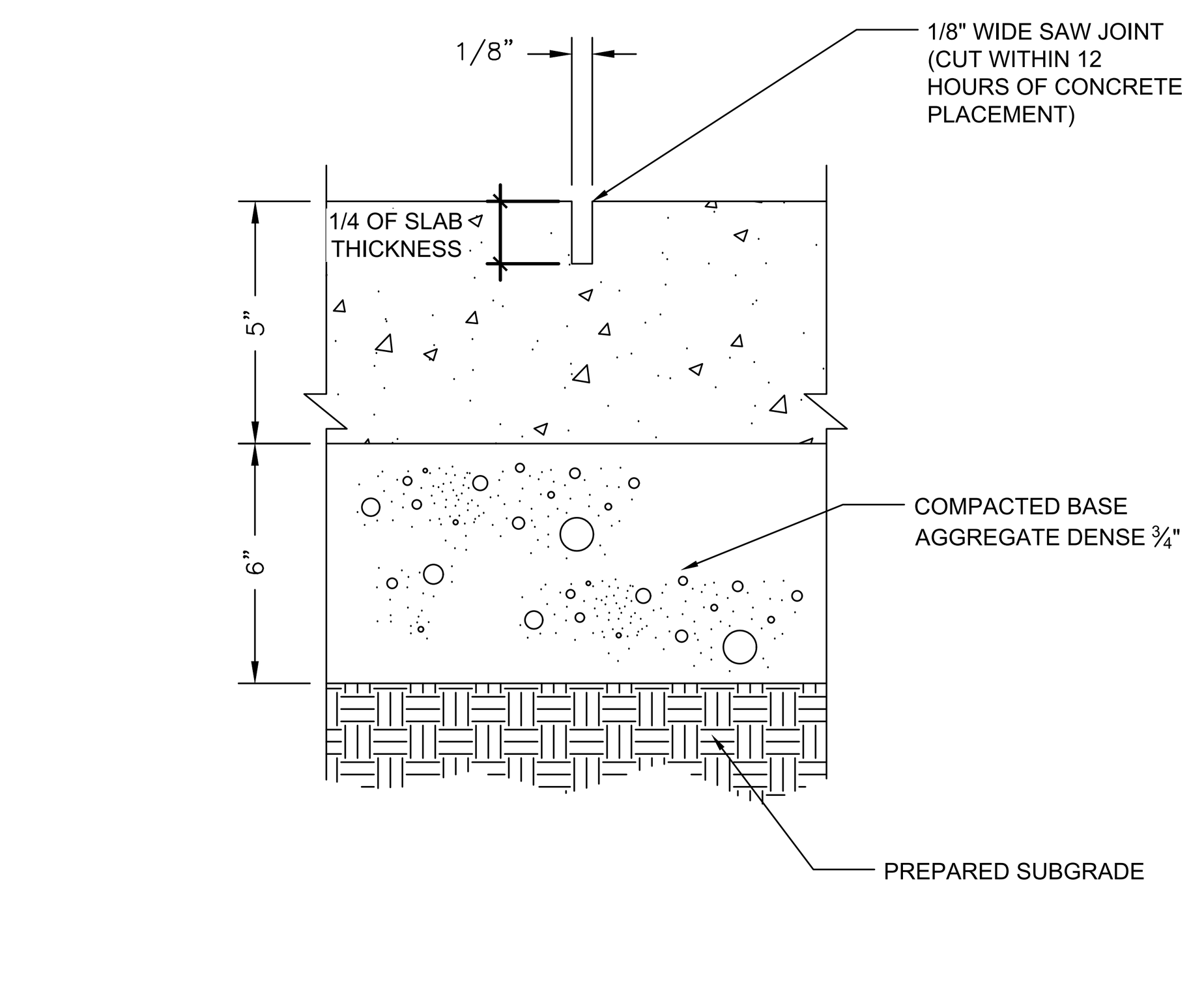


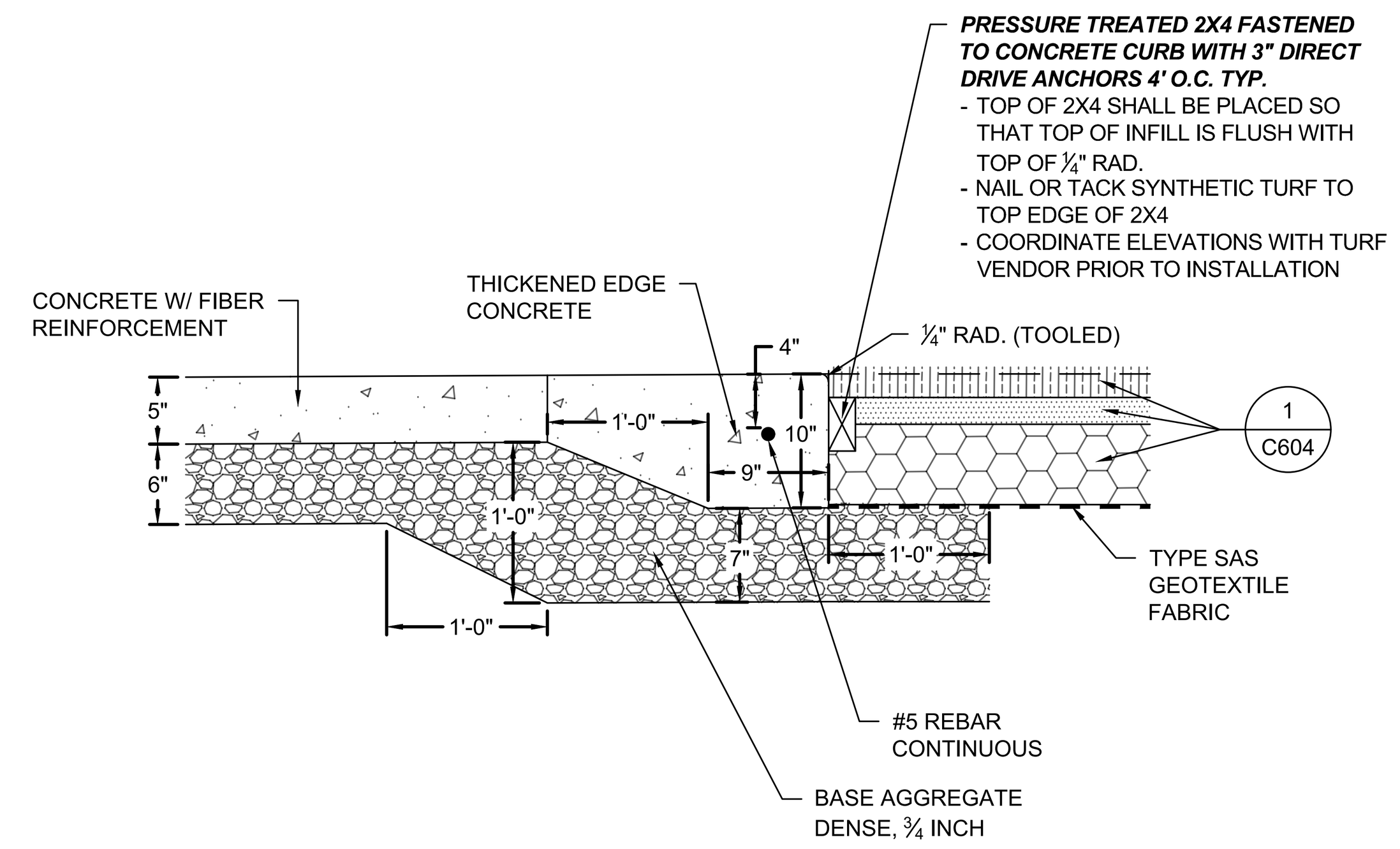
NOTES:
- PROVIDE EXPANSION JOINT EVERY 30' MINIMUM
- PROVIDE CONTROL JOINT EVERY 10' MINIMUM
- TOOL CONTROL JOINTS WITHIN 12 HOURS OF CONCRETE PLACEMENT

1. 5" CONCRETE PAVEMENT

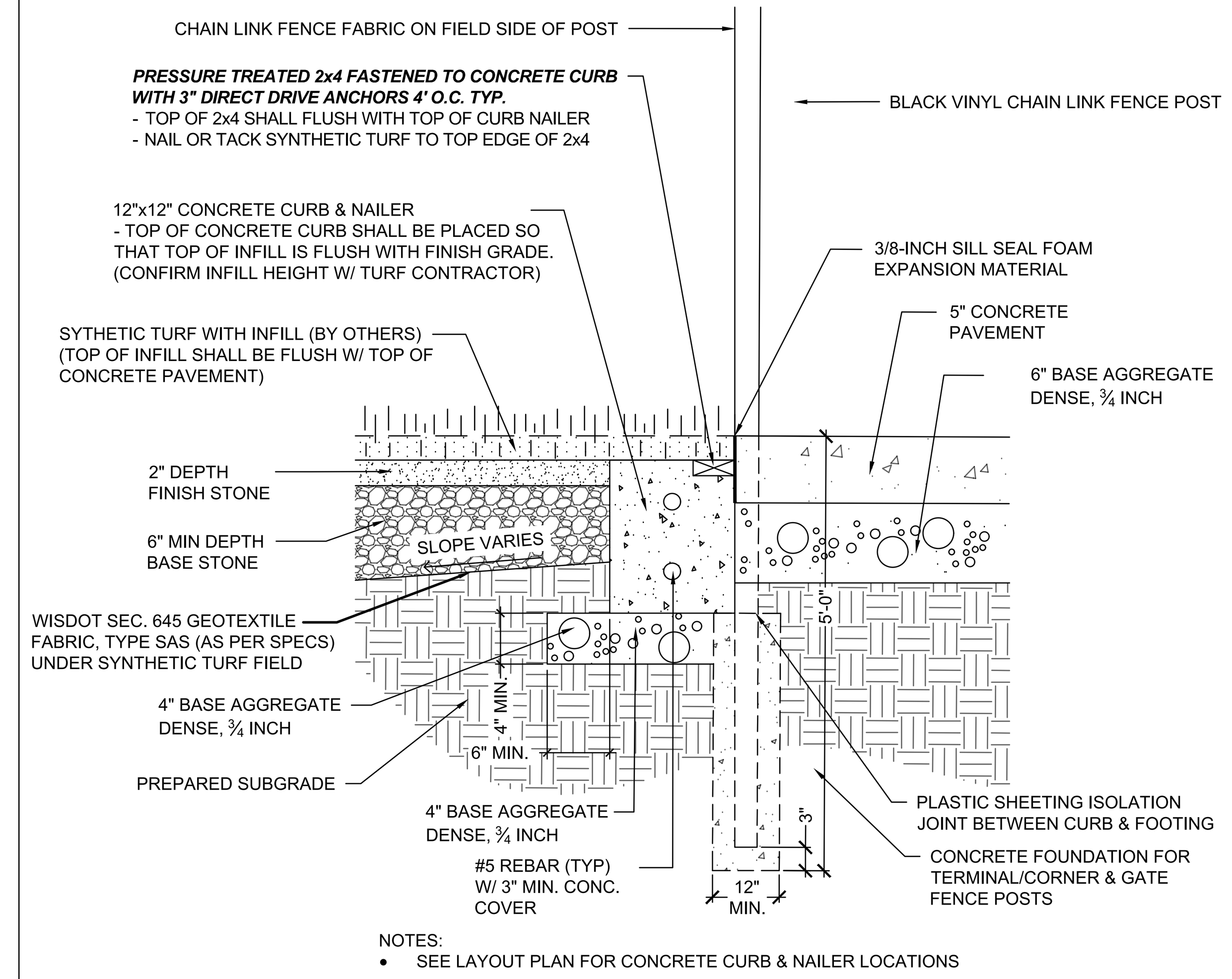


GENERAL NOTES:
- CONTROL JOINTS SHALL BE LOCATED AS INDICATED ON PLANS OR MAXIMUM SPACING OF 10'-0"

2. CONCRETE PAVEMENT CONTROL JOINT (TYP)

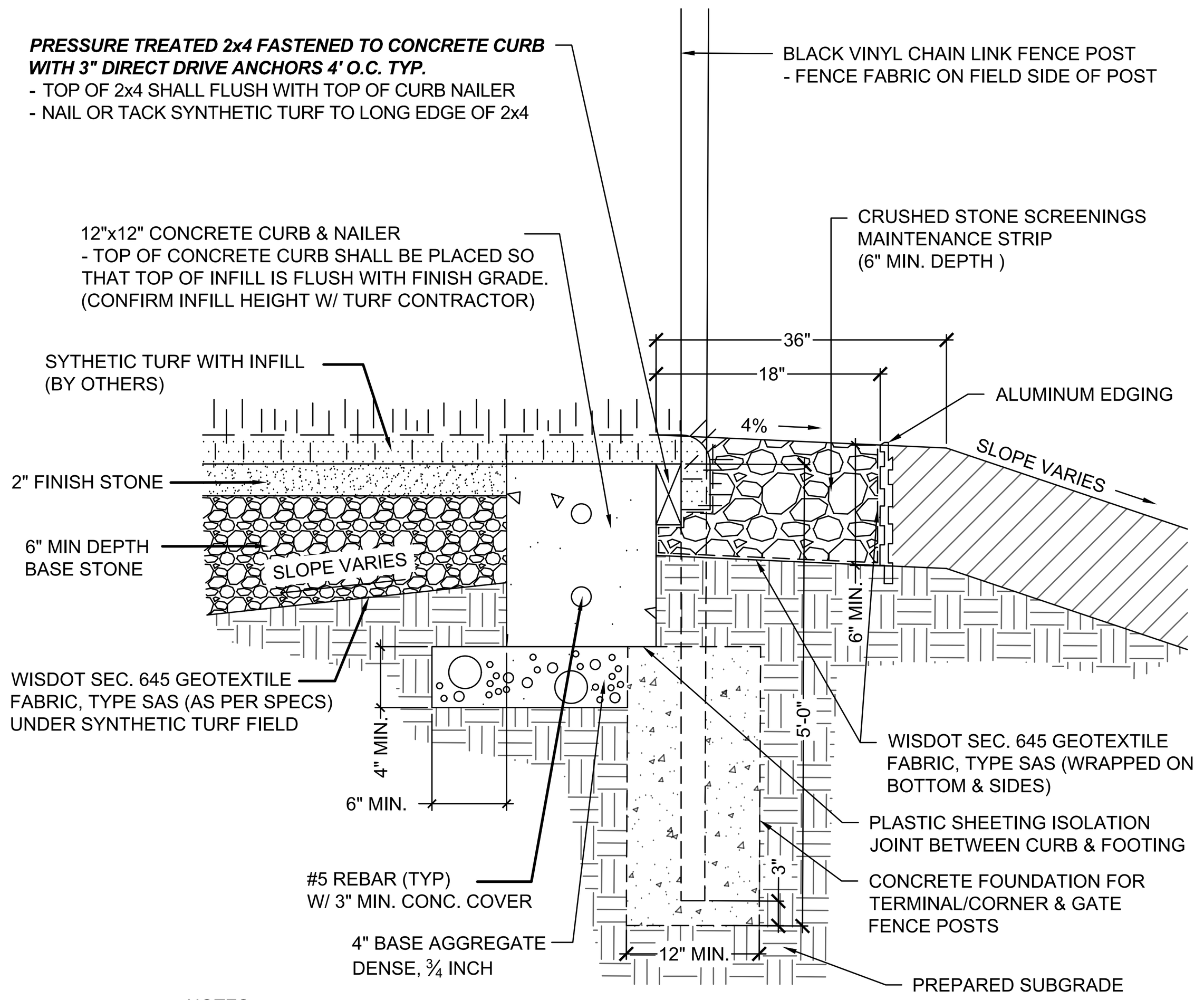


3. 5" REINFORCED THICKENED EDGE CONCRETE W/ NAILER



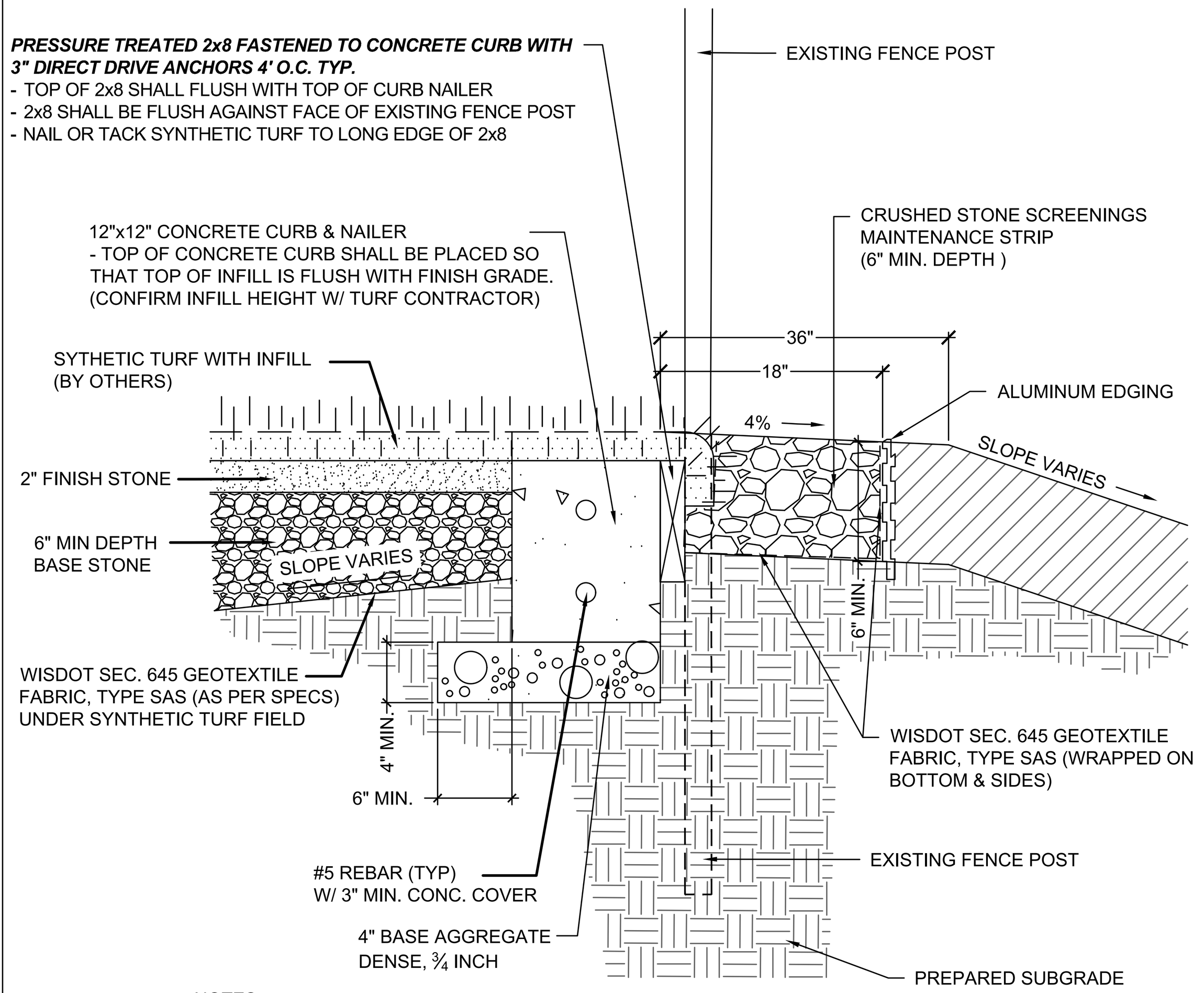
NOTES:
- SEE LAYOUT PLAN FOR CONCRETE CURB & NAILER LOCATIONS

4. CONCRETE CURB & NAILER: NAILER FLUSH W/ TOP OF CONCRETE (ADJACENT TO PAVEMENT)



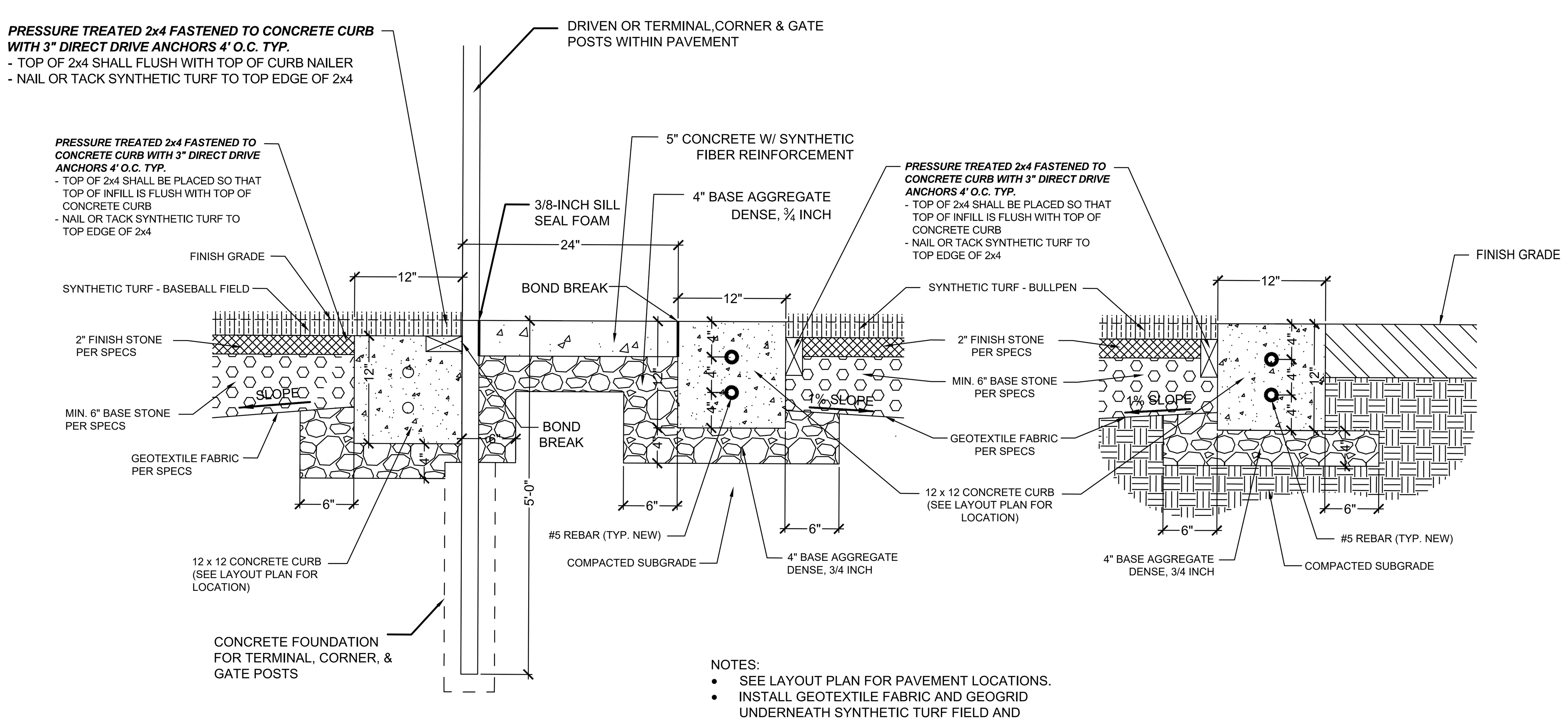
NOTES:
- SEE LAYOUT PLAN FOR CONCRETE CURB & NAILER LOCATIONS
- SEE MANUFACTURER'S SPECIFICATIONS FOR PROPER INSTALLATION OF ALUMINUM EDGING

5. CONCRETE CURB & NAILER: TURF WRAPPED OVER NAILER (ADJACENT TO GRASS)



NOTES:
- SEE LAYOUT PLAN FOR CONCRETE CURB & NAILER LOCATIONS
- SEE MANUFACTURER'S SPECIFICATIONS FOR PROPER INSTALLATION OF ALUMINUM EDGING

6. CONCRETE CURB & NAILER: TURF WRAPPED OVER NAILER (ADJACENT TO EXISTING FENCE)

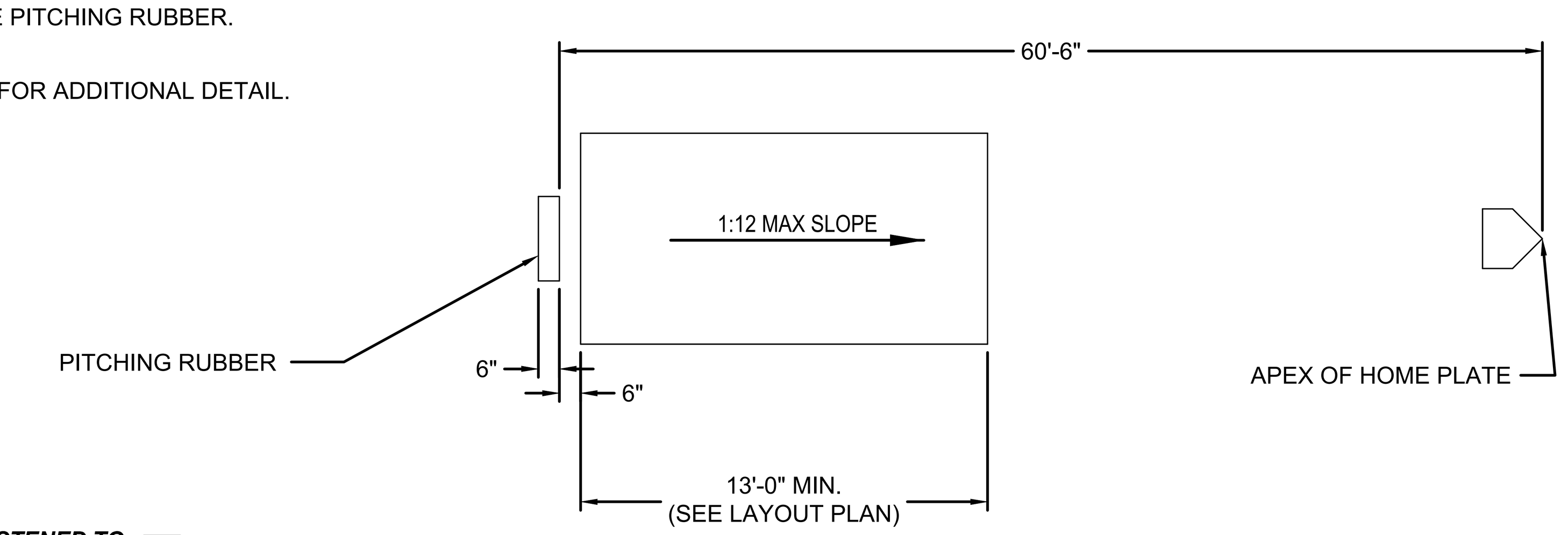


NOTES:
- SEE LAYOUT PLAN FOR PAVEMENT LOCATIONS.
- INSTALL GEOTEXTILE FABRIC AND GEOGRID UNDERNEATH SYNTHETIC TURF FIELD AND PAVEMENT PER SPECS.

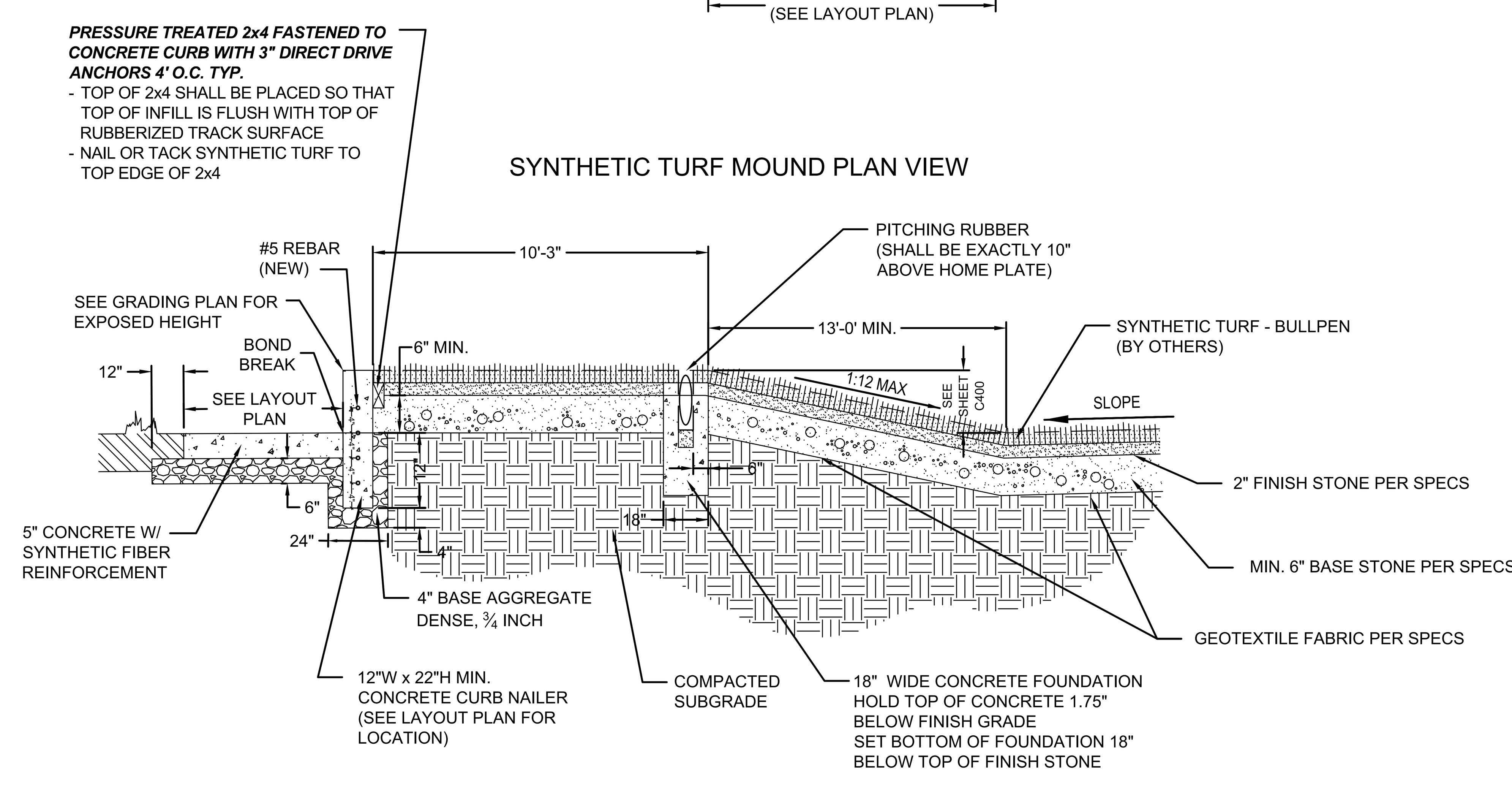
7. CONCRETE CURB NAILER: EXPOSED CURB (BULLPEN)

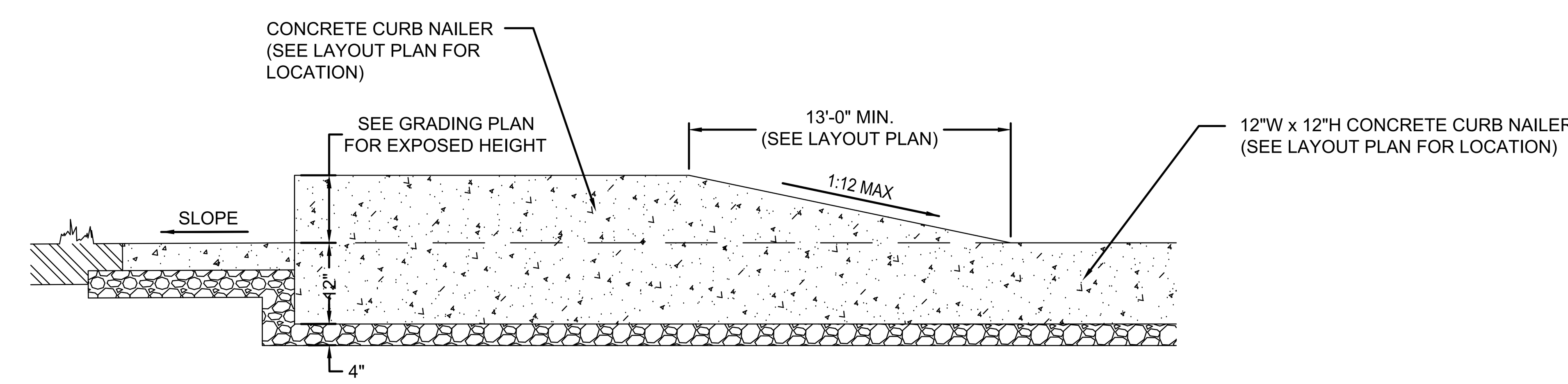
NOTES

1. TOP OF PITCHING RUBBER SHALL BE 10" ABOVE TOP OF APEX OF HOME PLATE
2. TOP OF MOUND SHALL BE LEVEL WITH THE PITCHING RUBBER.
3. SEE LAYOUT AND GRADING PLAN SHEETS FOR ADDITIONAL DETAIL.



SYNTHETIC TURF MOUND PLAN VIEW





MOUND CROSS SECTION

8. SYNTHETIC TURF BASEBALL PITCHING MOUND

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Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title: SITE CONSTRUCTION DETAILS

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Graphic Scale 0' 5' 10' 20' 30'

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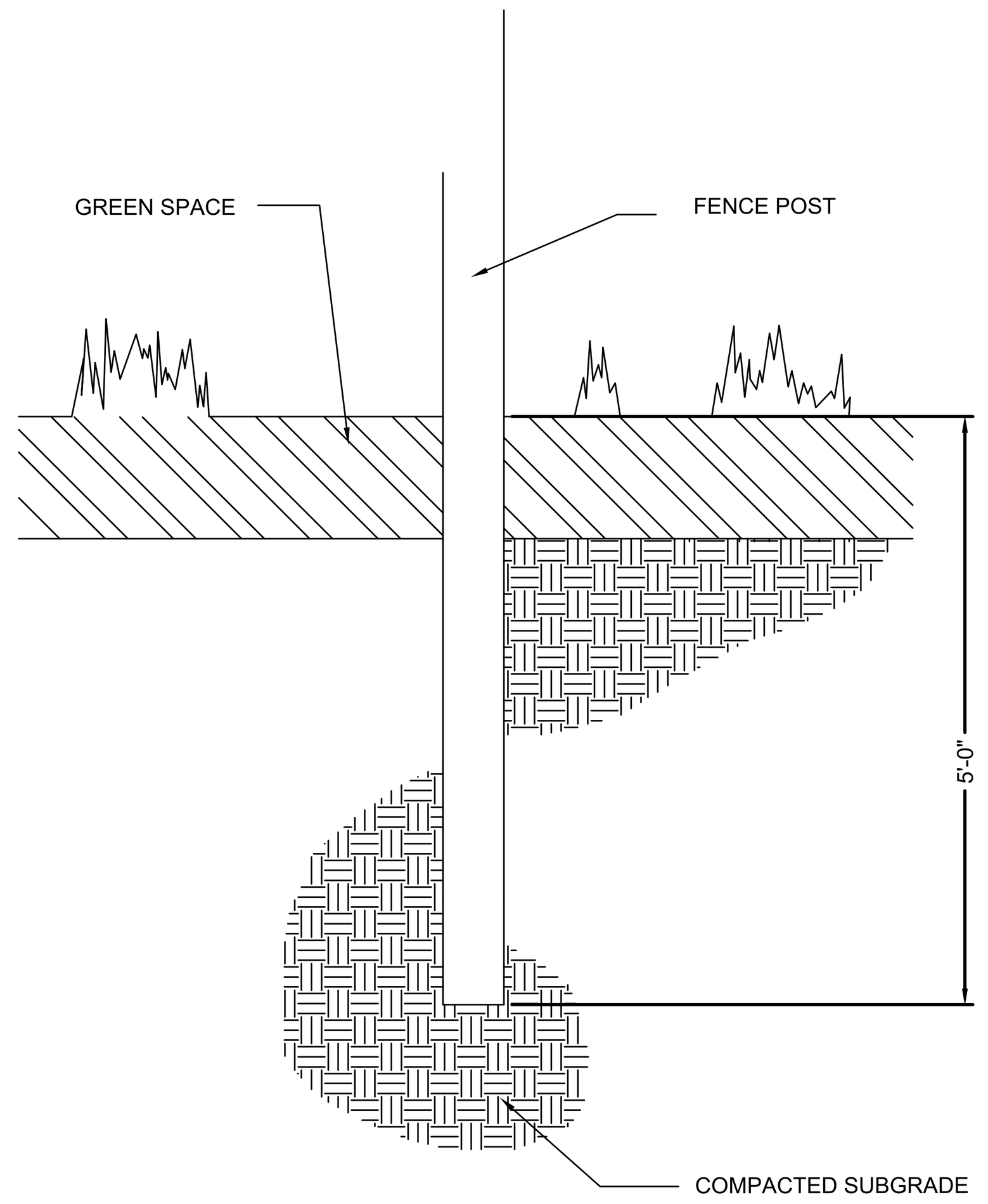
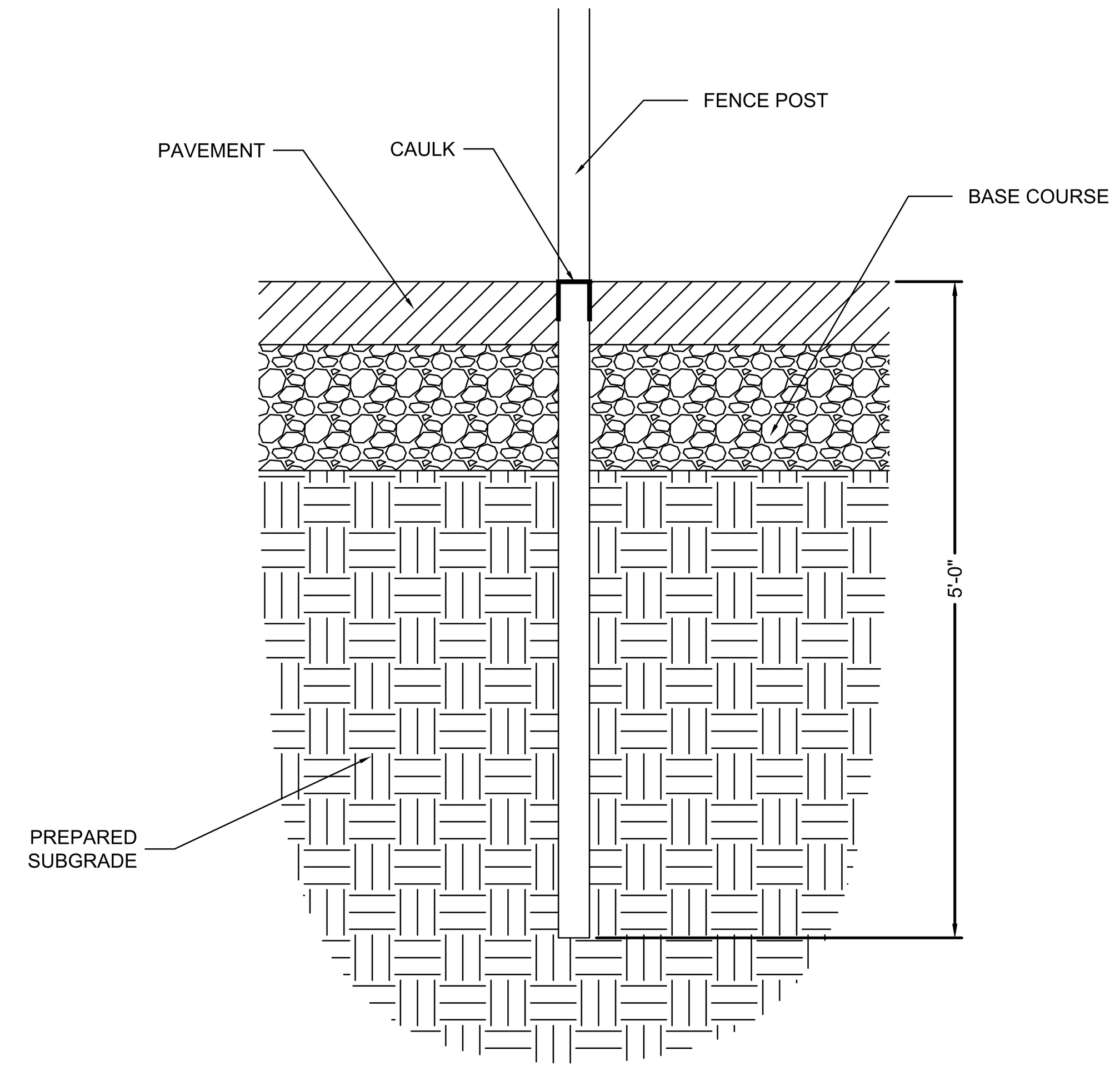


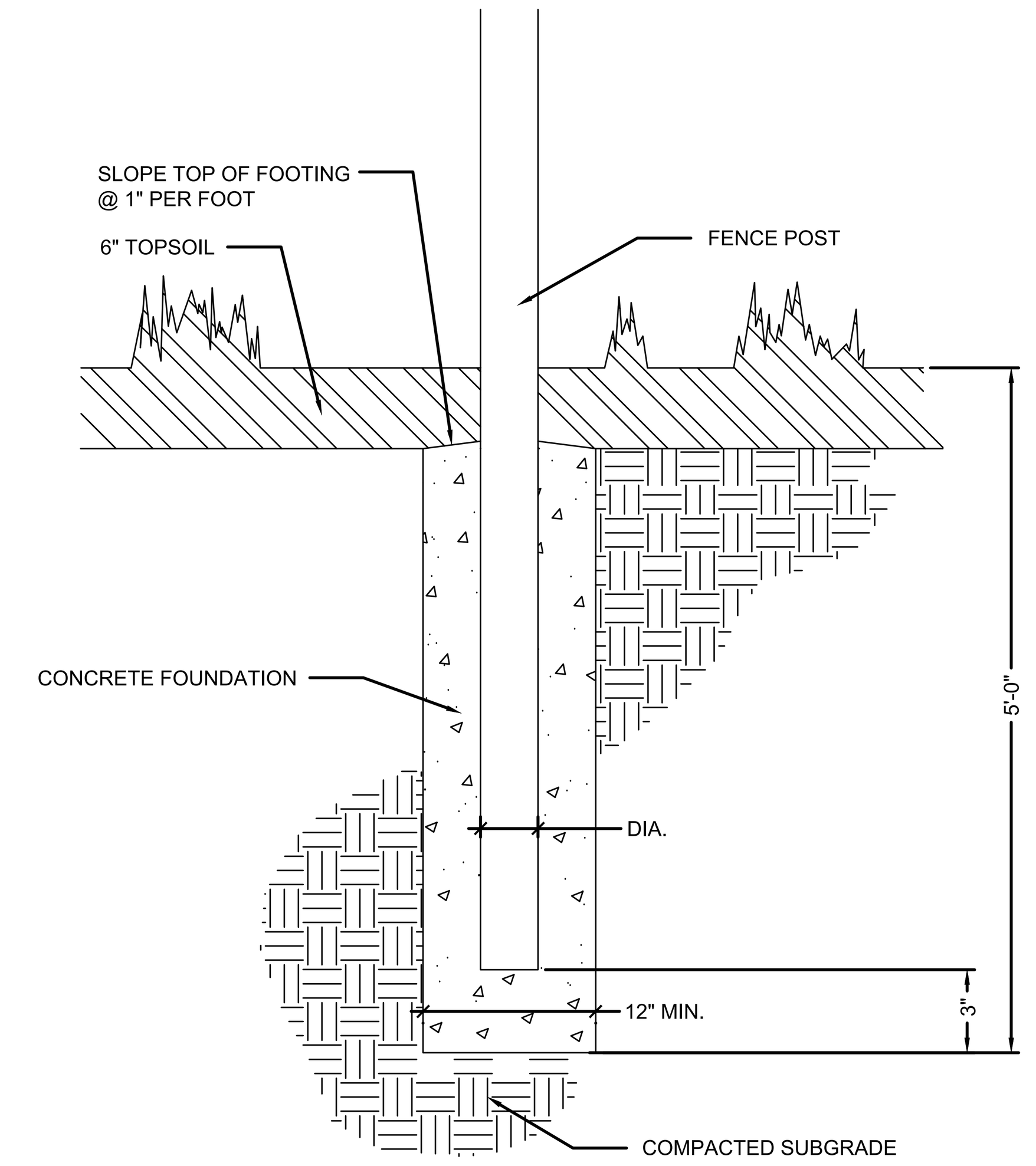
NOTES:
- SEE LAYOUT SHEET FOR DRIVEN LINE POST LOCATIONS
- VERIFY EXISTING UTILITIES PRIOR TO DRIVING POSTS.

1. DRIVEN FENCE POST



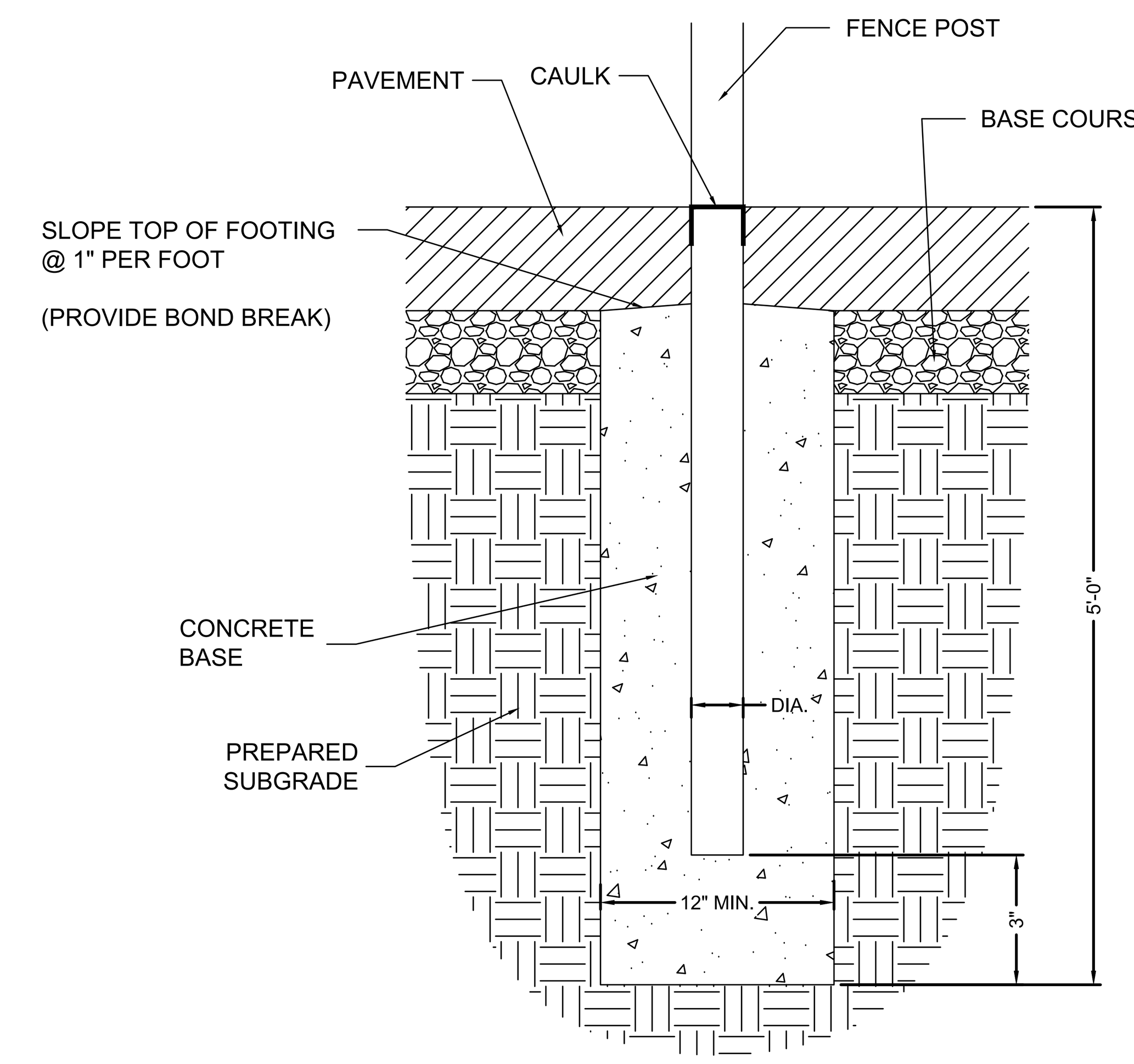
NOTES:
- ALL LINE POSTS DRIVEN THROUGH PAVEMENT SHALL BE SEALED WITH CAULK.
- VERIFY EXISTING UTILITIES PRIOR TO DRIVING POSTS.

2. DRIVEN FENCE POST IN PAVEMENT



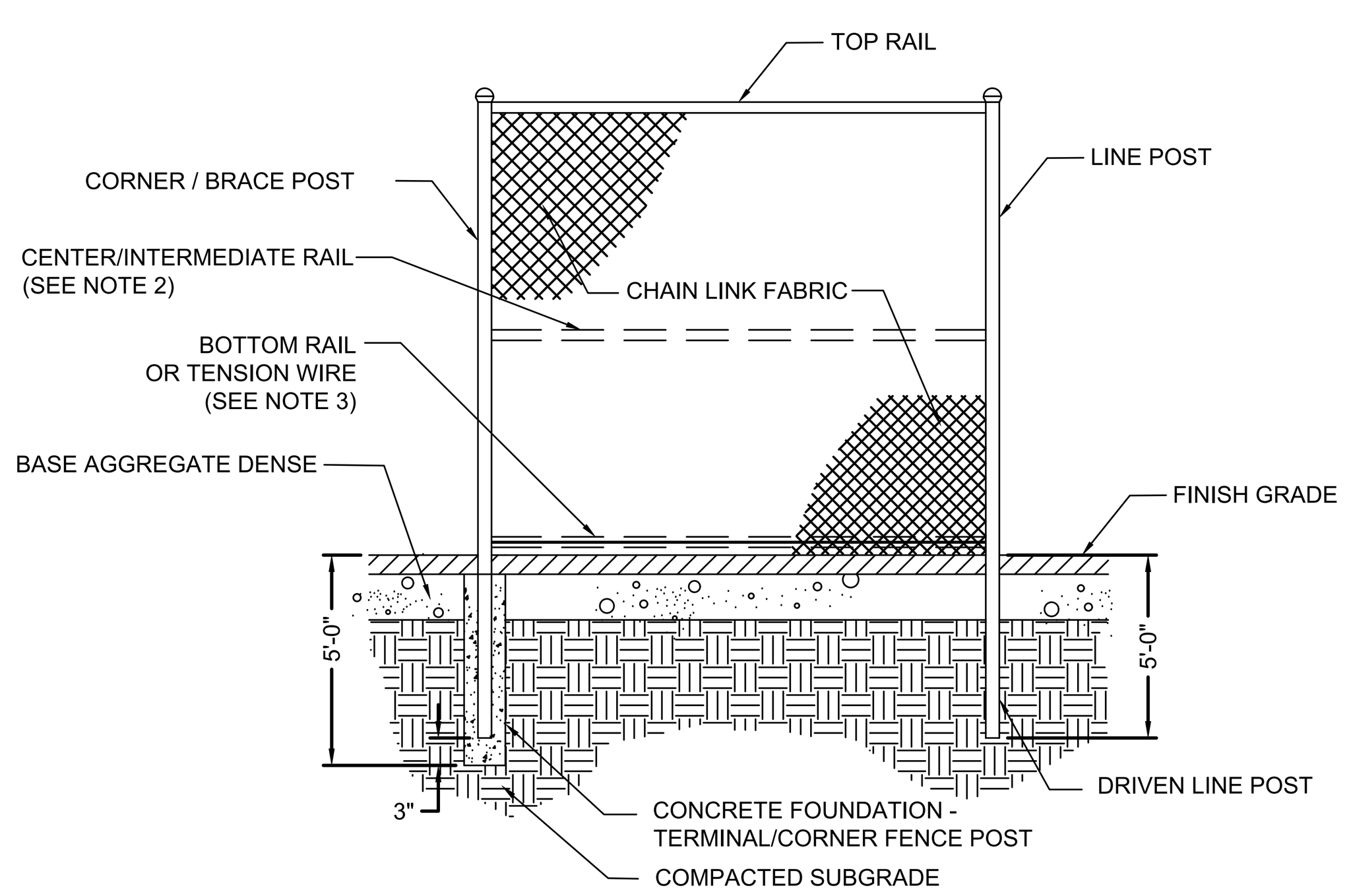
NOTES:
- SEE LAYOUT SHEET FOR TERMINAL/CORNER POST LOCATION.
- VERIFY EXISTING UTILITIES PRIOR TO POST HOLE EXCAVATION.

3. TERMINAL/CORNER FENCE POST



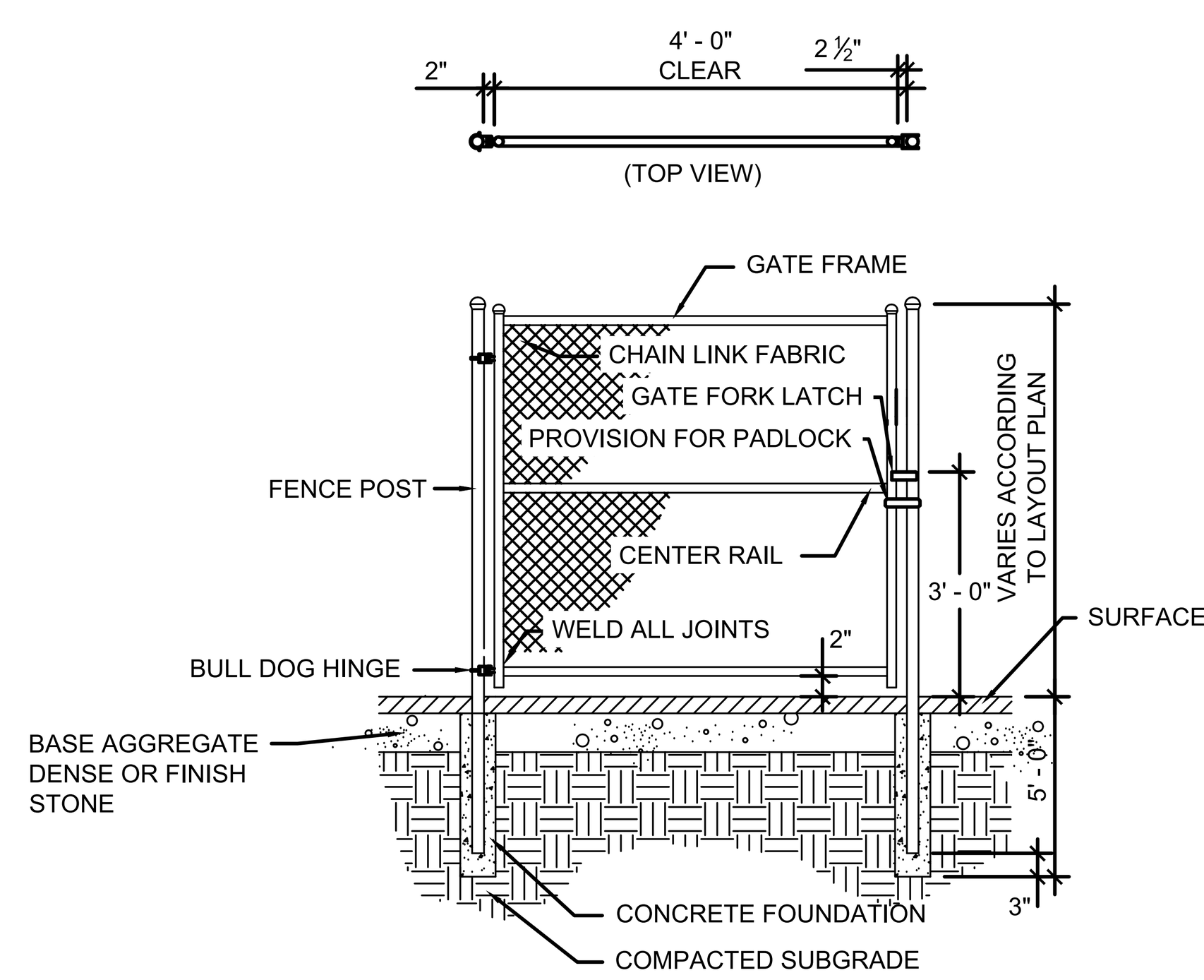
NOTES:
1. SEE LAYOUT SHEET FOR TERMINAL/CORNER POST LOCATION.
2. ALL TERMINAL/CORNER POSTS WITHIN PAVEMENT SHALL BE SEALED WITH CAULK.
3. VERIFY EXISTING UTILITIES PRIOR TO INSTALLING TERMINAL/CORNER POSTS.

4. TERMINAL/CORNER FENCE POST WITHIN PAVEMENT

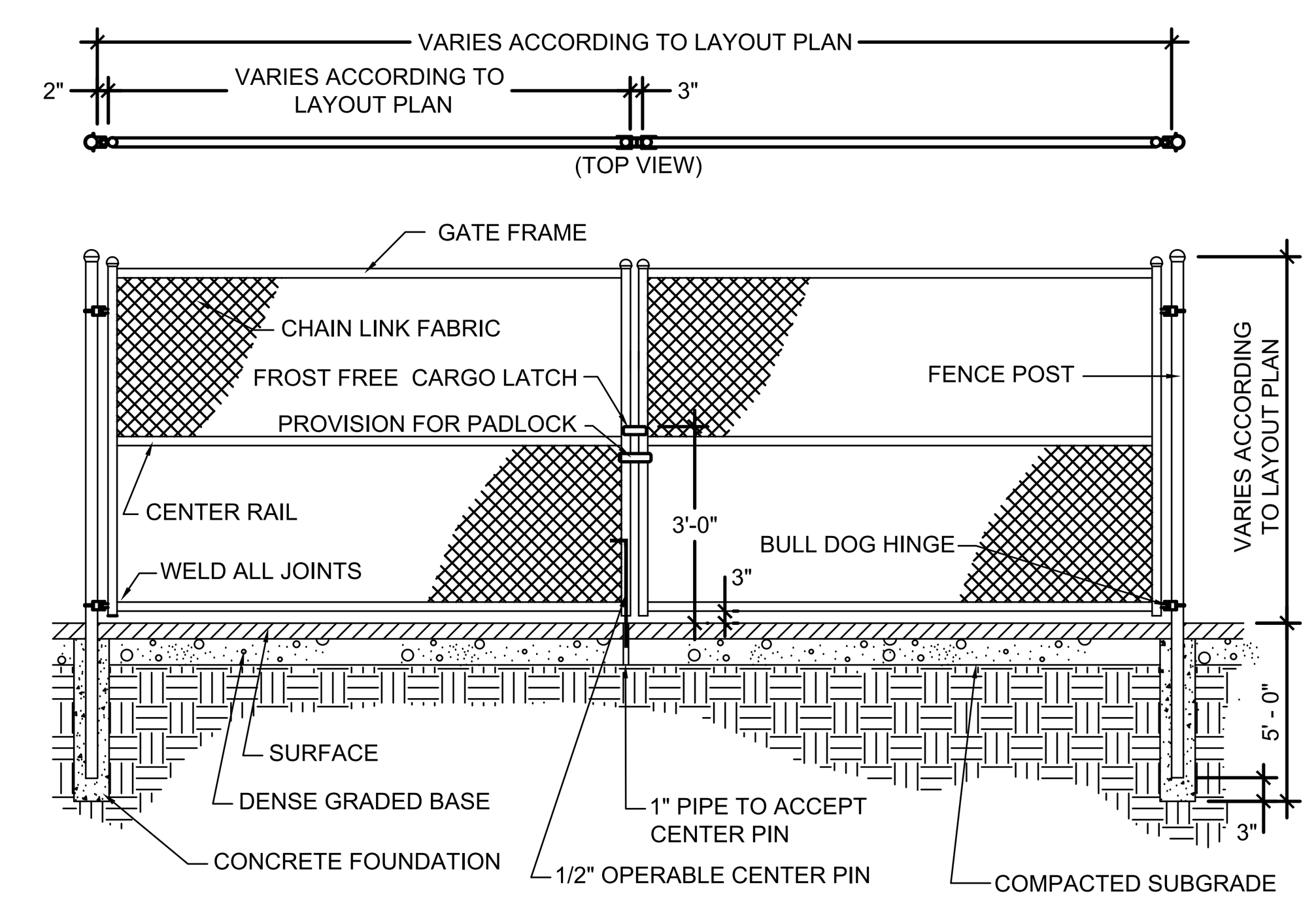


NOTES:
1. SEE LAYOUT PLANS FOR FENCE HEIGHTS
2. CENTER RAIL INSTALLED FOR FENCE SECTIONS 8' AND HIGHER
3. 3.5'H FENCE - BOTTOM RAIL
   8'H FENCE - TENSION WIRE
   12'H FENCE - BOTTOM RAIL

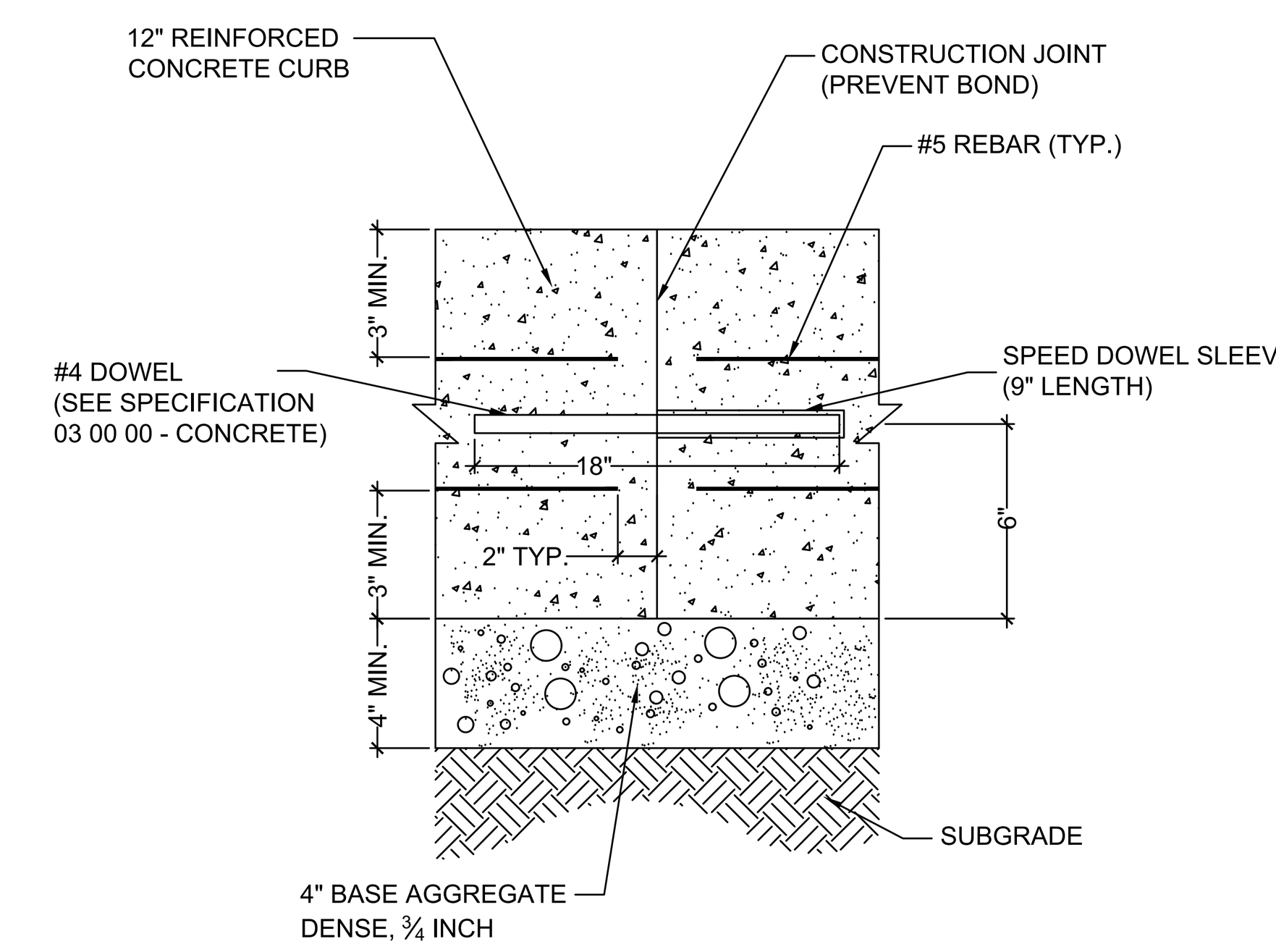
5. CHAIN LINK FENCE SECTION



6. 4' WIDE GATE

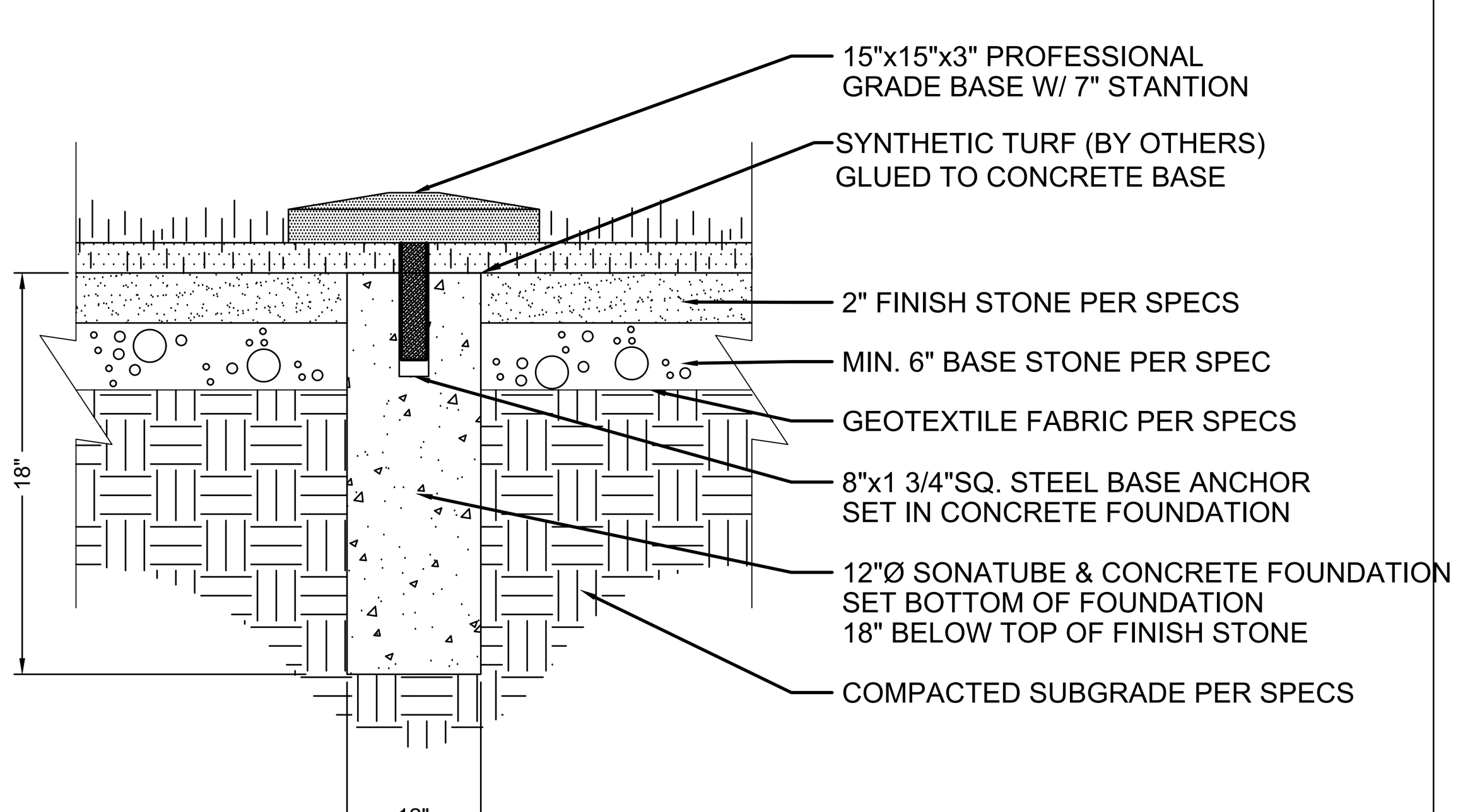


7. 10', 12', AND 16' WIDE GATE



GENERAL NOTE: SEE LAYOUT PLAN FOR SPEED DOWEL LOCATIONS

8. SPEED DOWEL



SYNTHETIC TURF

9 BASEBALL BASE ANCHOR

AYRES
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920.498.1200
AA #23-1948.40

Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

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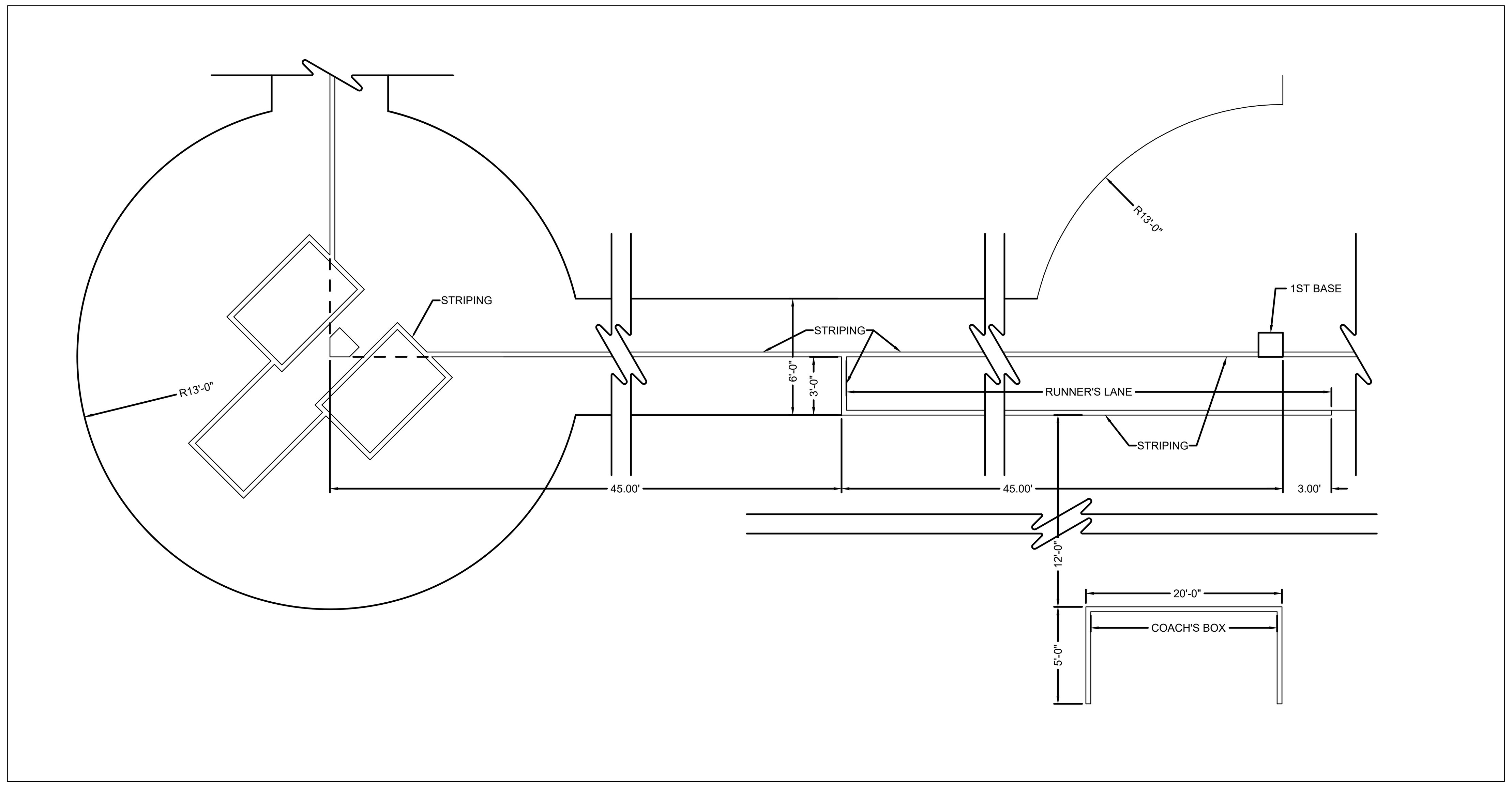
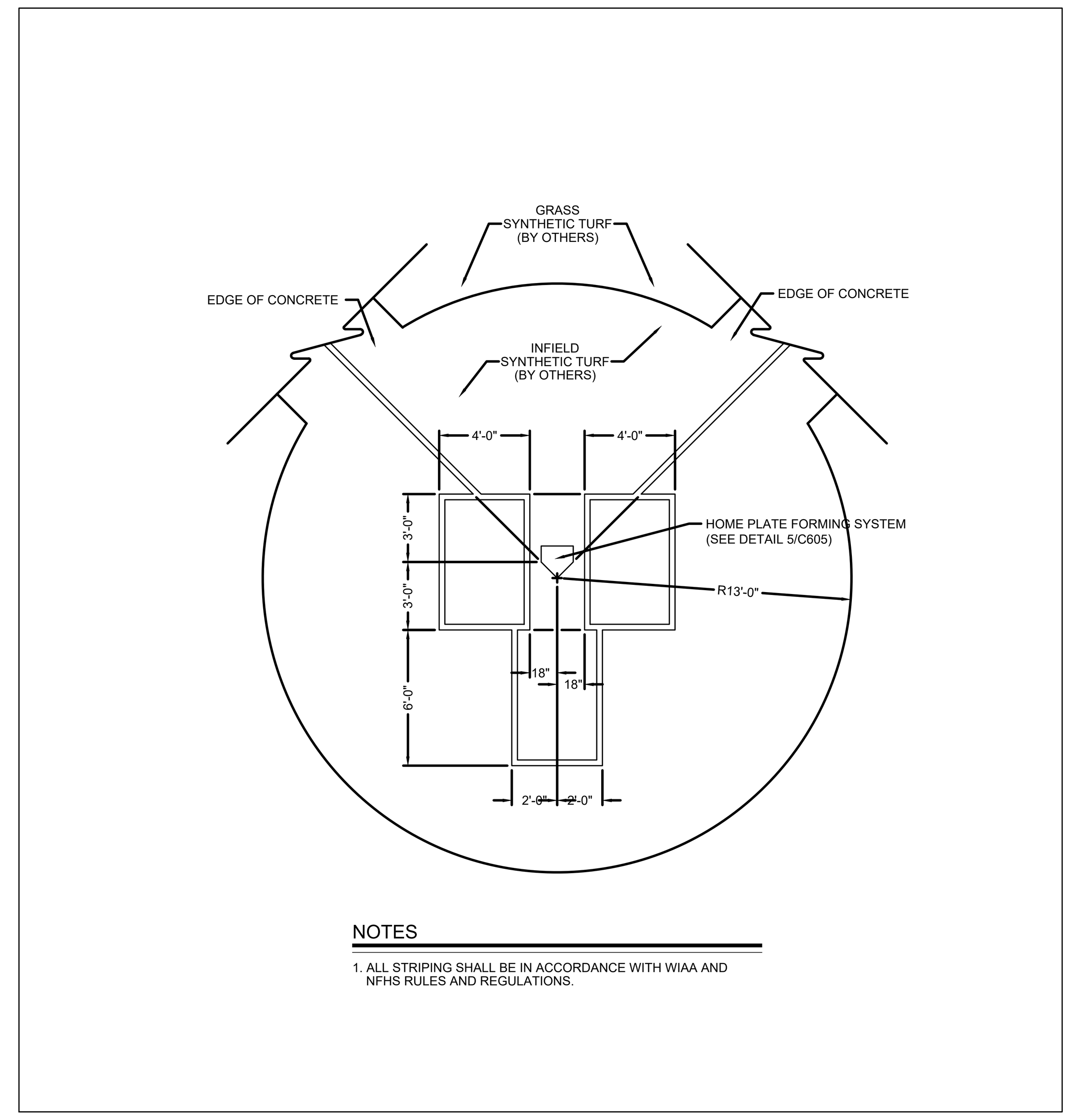


1. BASEBALL FIRST BASE STIRPING



2. BASEBALL HOME PLATE STRIPING

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AA #23-1948.40

Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title:
SITE CONSTRUCTION DETAILS

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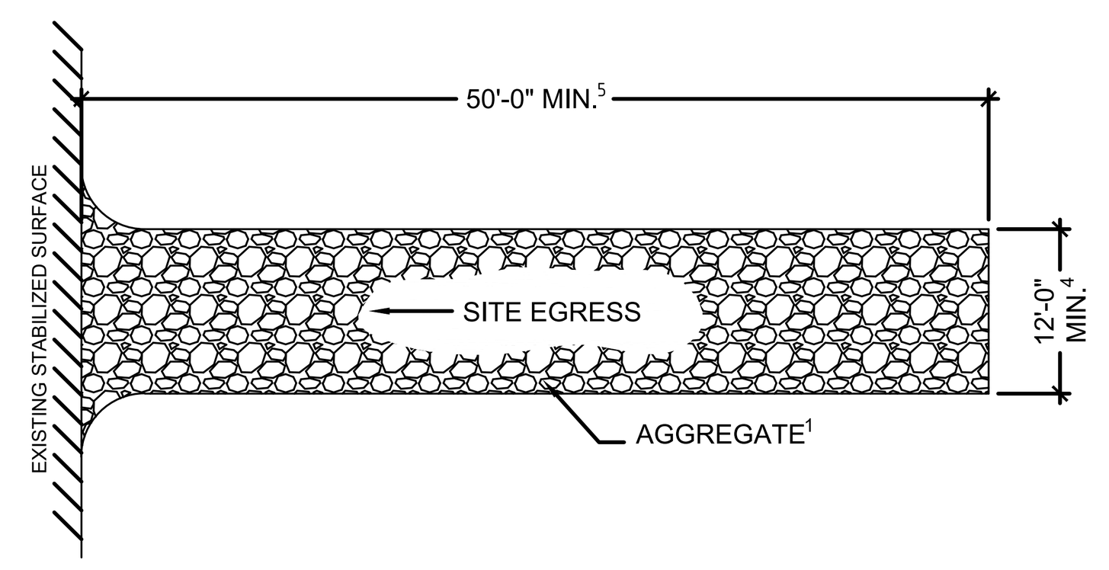
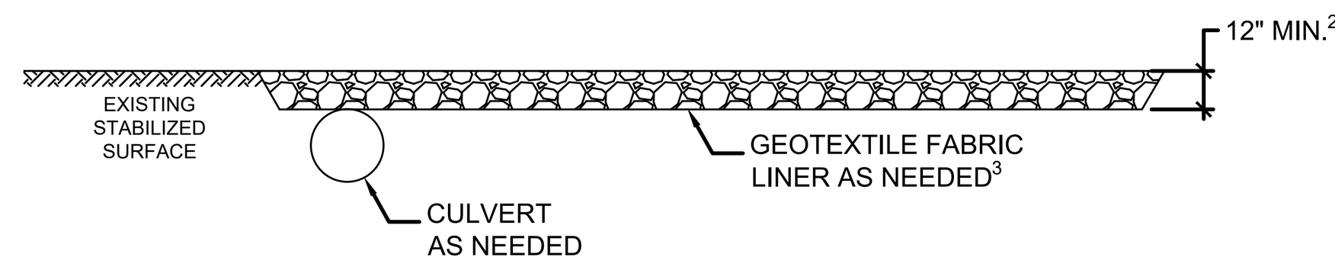


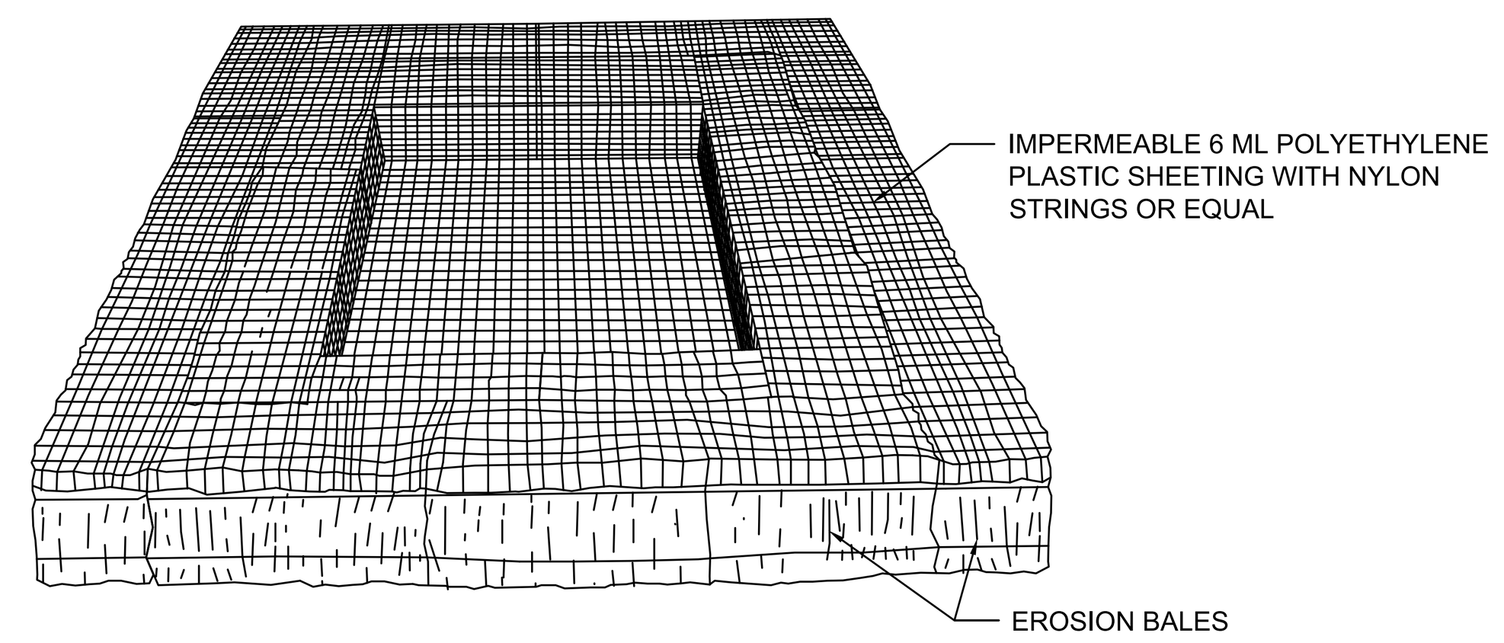


NOTES:
1. USE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION BELOW. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) 2018 STANDARD SPECIFICATION, SECTION 312, SELECT CRUSHED MATERIAL.

SIEVE	PERCENT PASSING (BY WEIGHT)
3"	100
2-½"	90-100
1-½"	25-60
¾"	0-20
⅜"	0-5

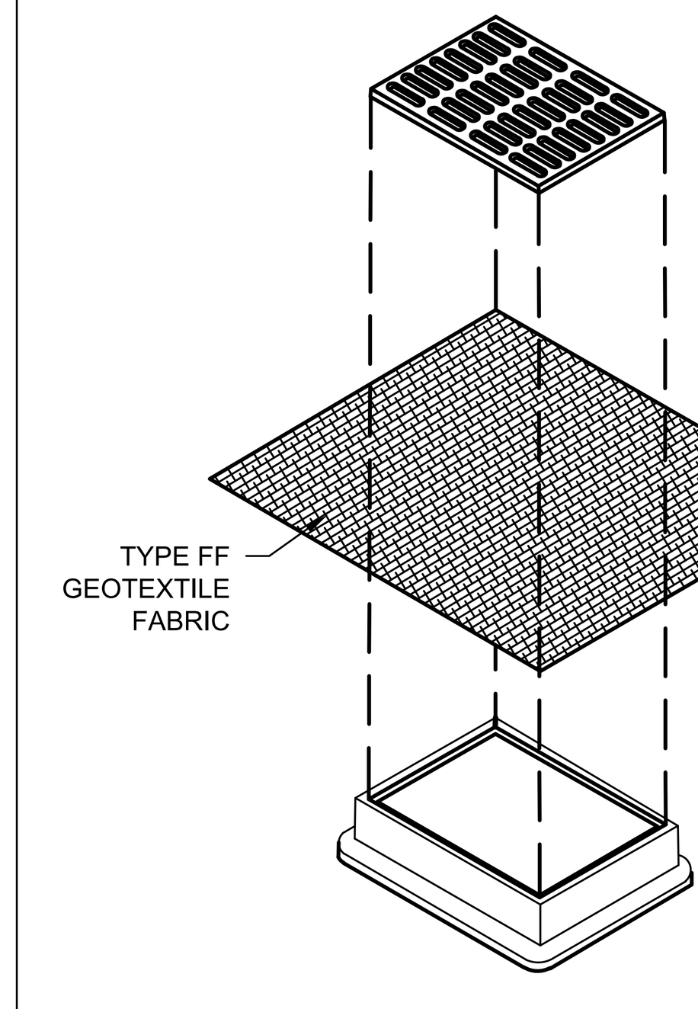
2. SLOPE THE STONE TRACKING PAD IN A MANNER TO DIRECT RUNOFF TO AN APPROVED TREATMENT PRACTICE.
3. SELECT FABRIC TYPE BASED ON SOIL CONDITIONS AND VEHICLE LOADING.
4. INSTALL TRACKING PAD ACROSS FULL WIDTH OF THE ACCESS POINT, OR RESTRICT EXISTING TRAFFIC TO A DEDICATED EGRESS LANE AT LEAST 12 FEET WIDE ACROSS THE TOP OF THE PAD.
5. IF A 50' PAD LENGTH IS NOT POSSIBLE DUE TO SITE GEOMETRY, INSTALL THE MAXIMUM LENGTH PRACTICABLE AND SUPPLEMENT WITH ADDITIONAL PRACTICES AS NEEDED.

1. TEMPORARY TRACKING PAD

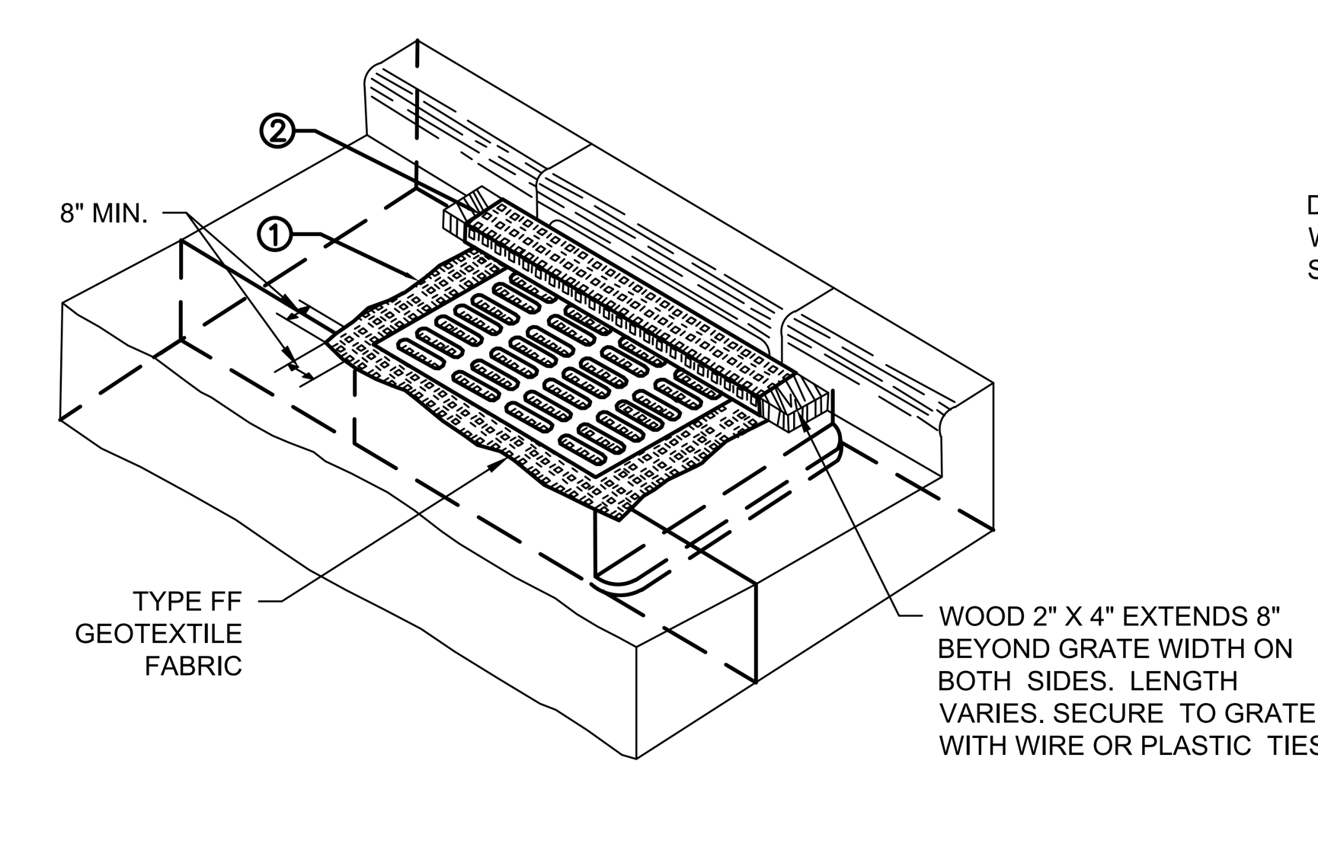


NOTES:
- REQUIRES SIGN SAYING "CONCRETE TRUCK WASH AREA"
- WATER IS HIGHLY ALKALINE AND SHALL NOT BE DISCHARGED FROM WASH-OUT AREA

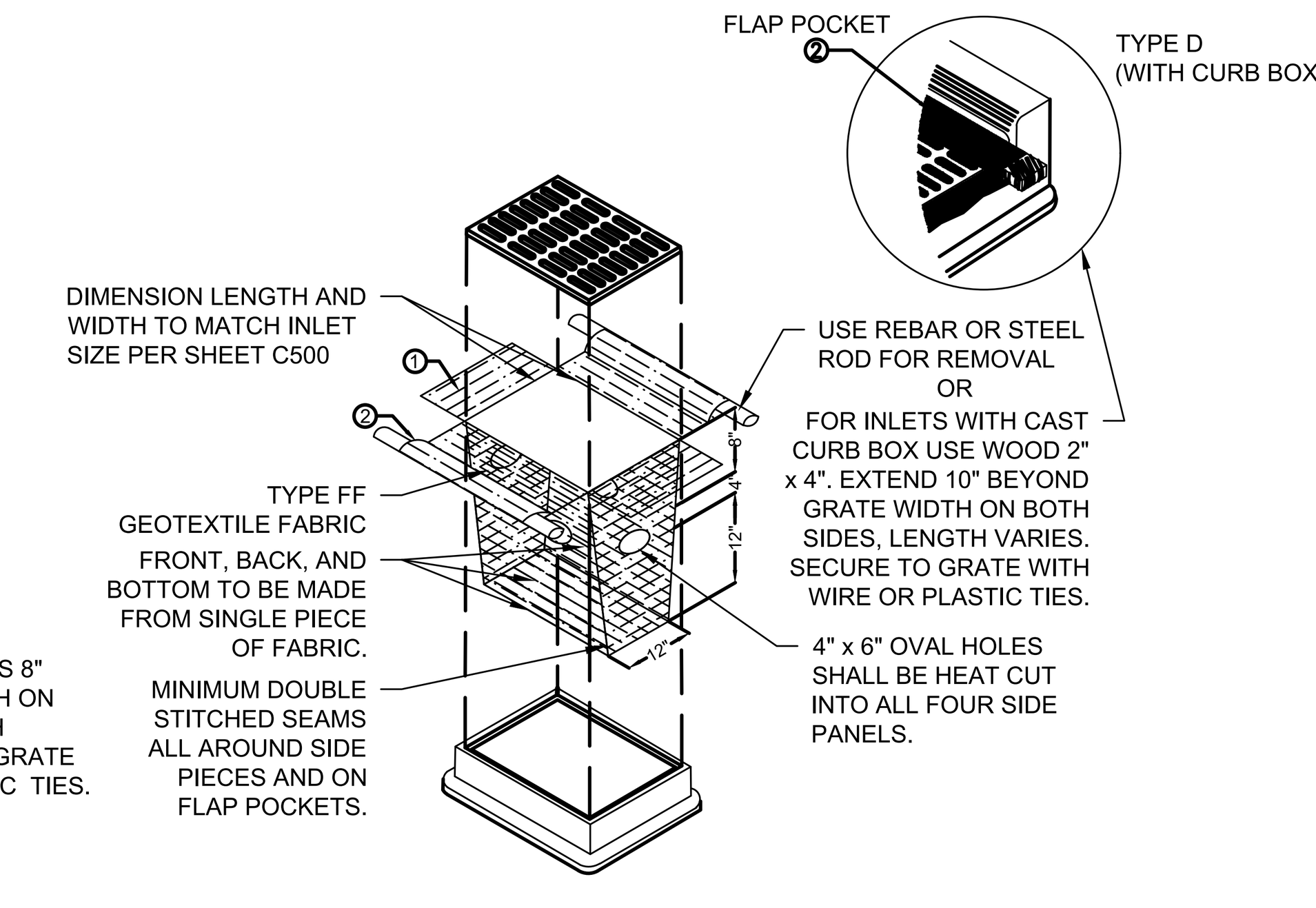
2. CONCRETE TRUCH WASH AREA



TYPE B (WITHOUT CURB BOX)



TYPE C (WITH CURB BOX)

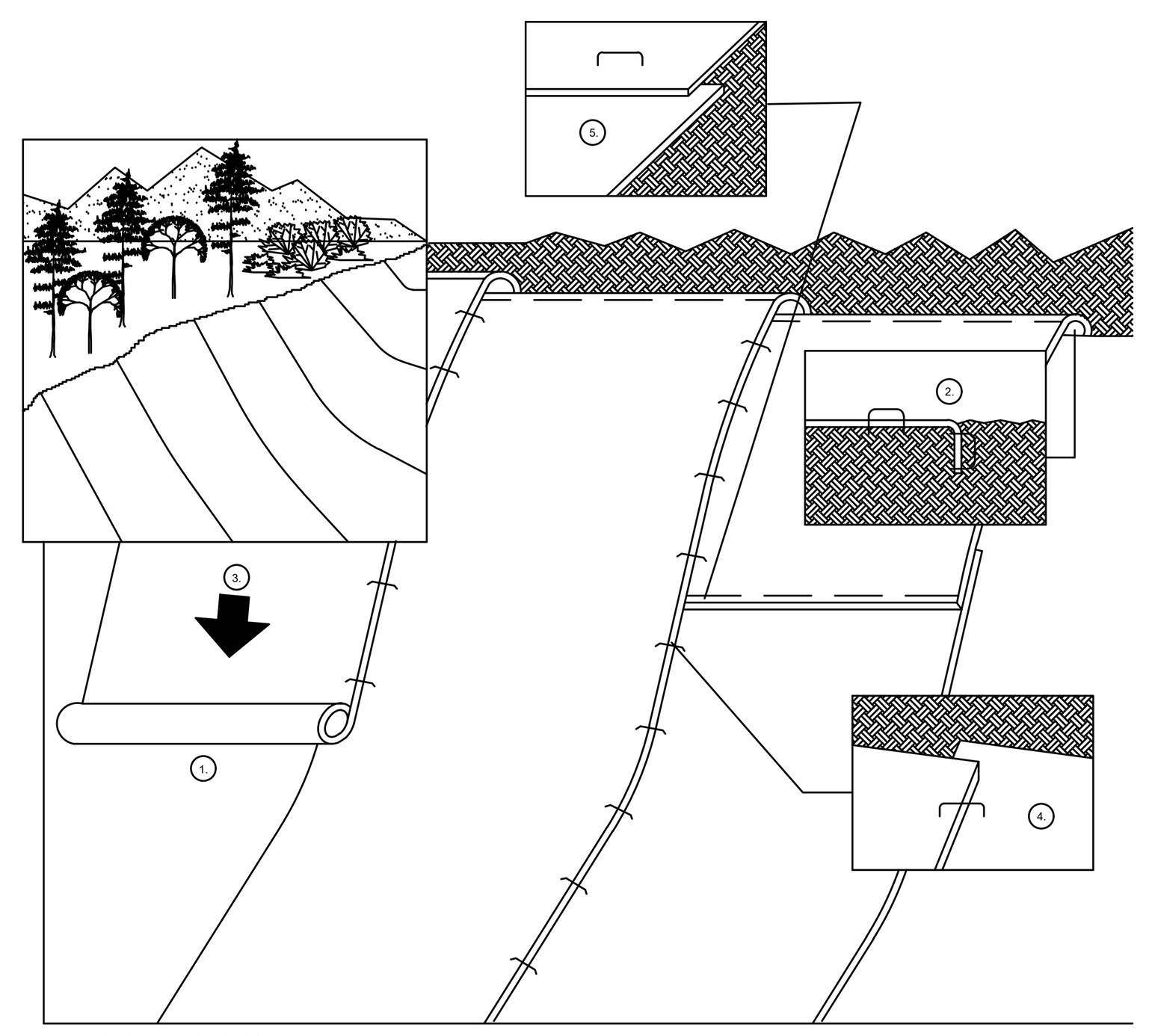


TYPE D (WITHOUT CURB BOX)

NOTES (APPLY TO BOTH TYPE B AND TYPE C INLET PROTECTION):
1. IF DEPTH IS MORE THAN 30" FROM INLET RIM TO CROWN OF PIPE, USE TYPE D INLET PROTECTION.
2. FABRIC SIZE SHALL BE 8-INCHES (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.
3. IF EXCESSIVE SEDIMENT LOADING PLUGS FABRIC, PLACE SAND BAGS AROUND INLET TO INTERCEPT SEDIMENT.
4. THE CONTRACTOR SHALL REMOVE SEDIMENT ADJACENT TO THE FABRIC PRIOR TO REPLACING OR REMOVING INLET PROTECTION.
5. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM LEAVING THE FABRIC AND ENTERING THE INLET.

NOTES (APPLY TO TYPE D INLET PROTECTION):
1. IF DEPTH IS LESS THAN 30" FROM INLET RIM TO CROWN OF PIPE, USE EITHER TYPE B OR TYPE C INLET PROTECTION.
2. FABRIC SIZE SHALL BE 8" (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

3. INLET PROTECTION, TYPE B, C, AND D



GENERAL NOTES:

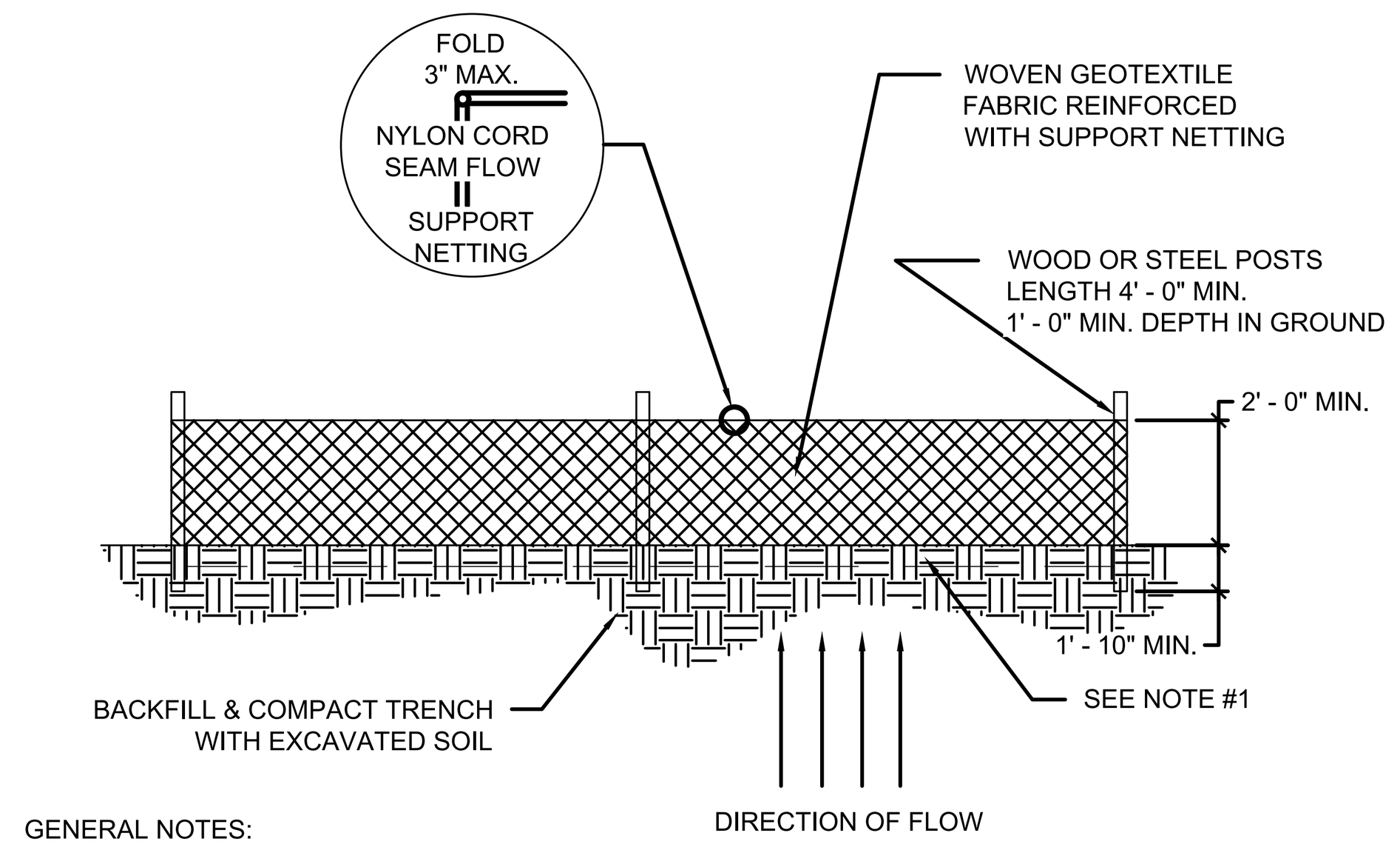
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA APPROXIMATELY 12" APART.

4. SLOPE EROSION MAT (CLASS I TYPE A)



GENERAL NOTES:

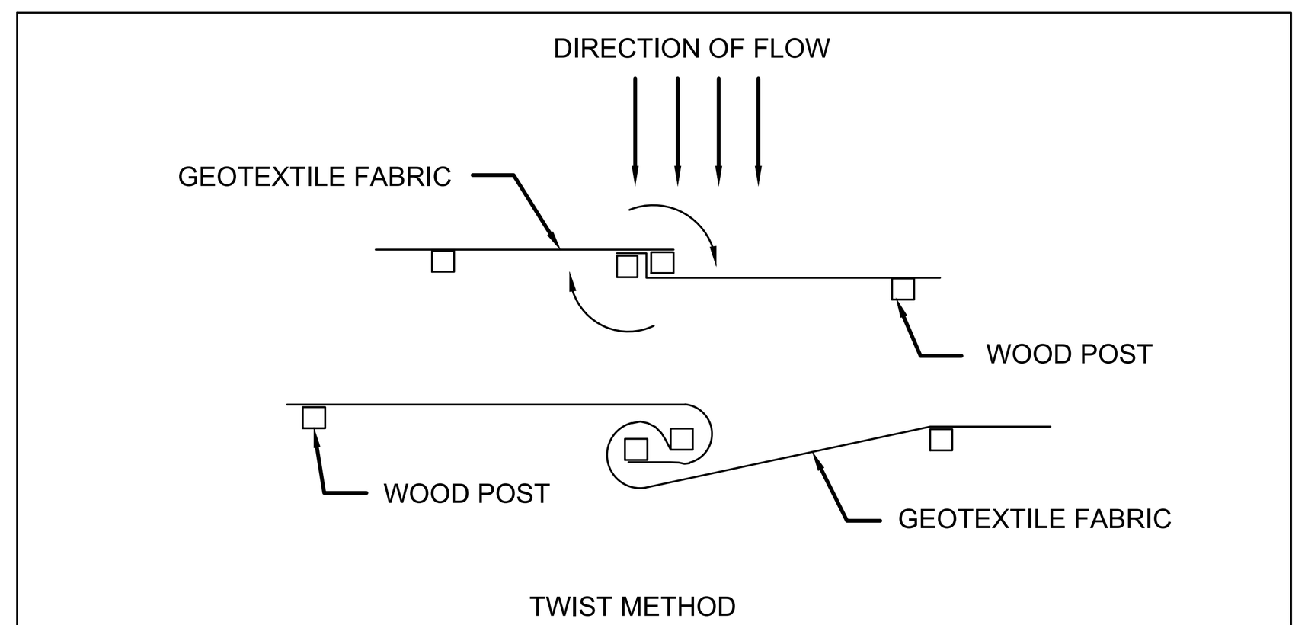
DETAILS OF CONSTRUCTION NOT SHOWN ON THESE DRAWINGS SHALL CONFORM TO CRITERIA SET BY AUTHORITIES HAVING JURISDICTION AND BY THE WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRATICE HANDBOOK.

WHEN POSSIBLE, THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE WITH THE ENDS POINTING UP SLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

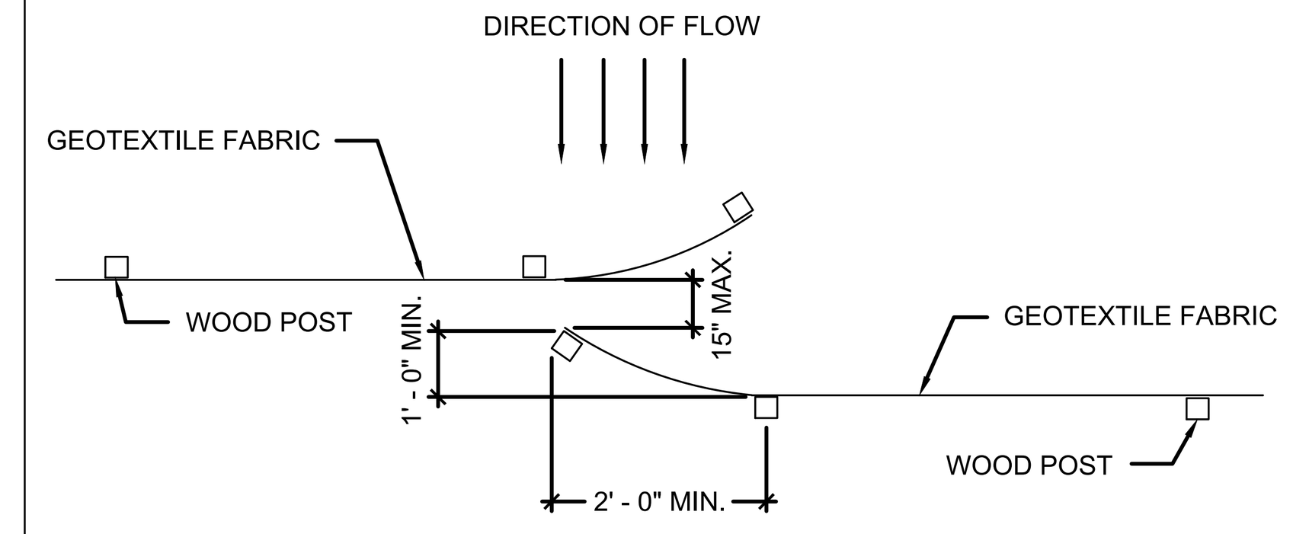
1. EXCAVATE A TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

2. WOVEN GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF ¾" OR EQUAL. A HEAVY-DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

3. STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM BEARING OF 128 LBS./LINEAL FOOT (WITHOUT ANCHOR). FINISH ANCHORS RESISTANT TO POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIAMETER OR 1 ⅛" x 3 ⅛", EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING WHICH SHALL BE A MINIMUM SIZE OF 1 ⅛" x 1 ⅛" x 48" OAK OR HICKORY.



TWIST METHOD

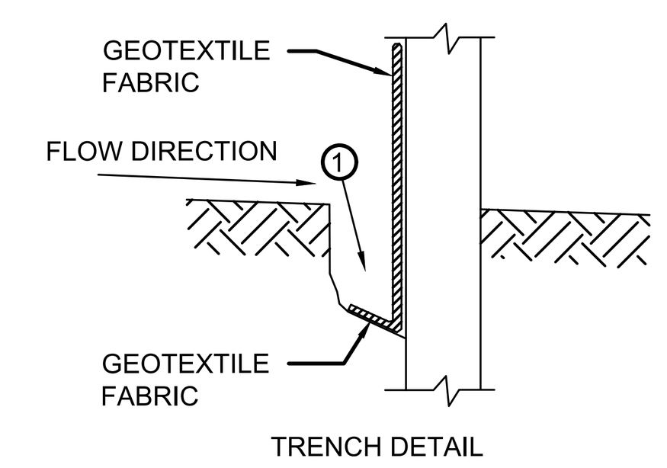


HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE

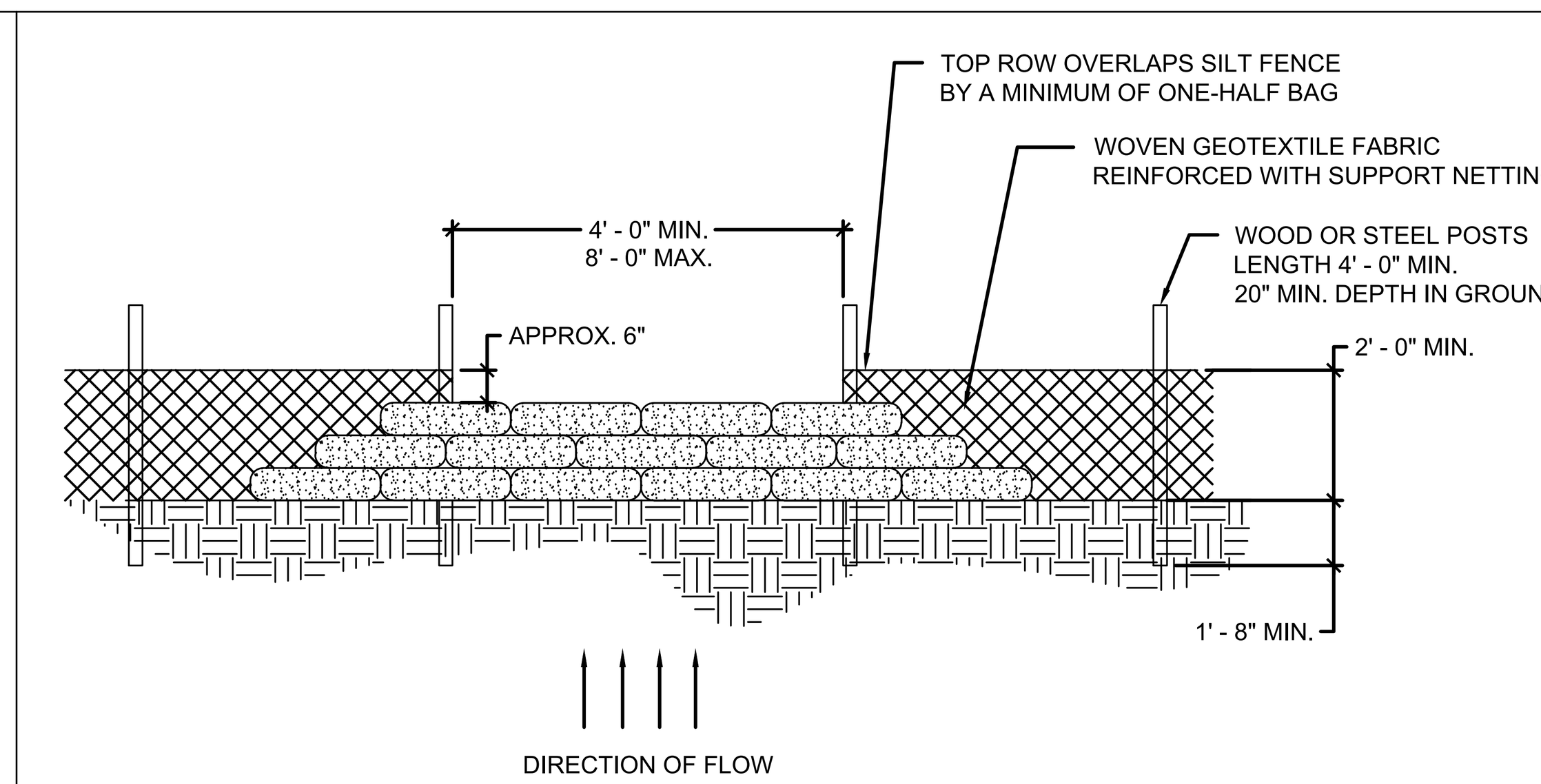
NOTE:

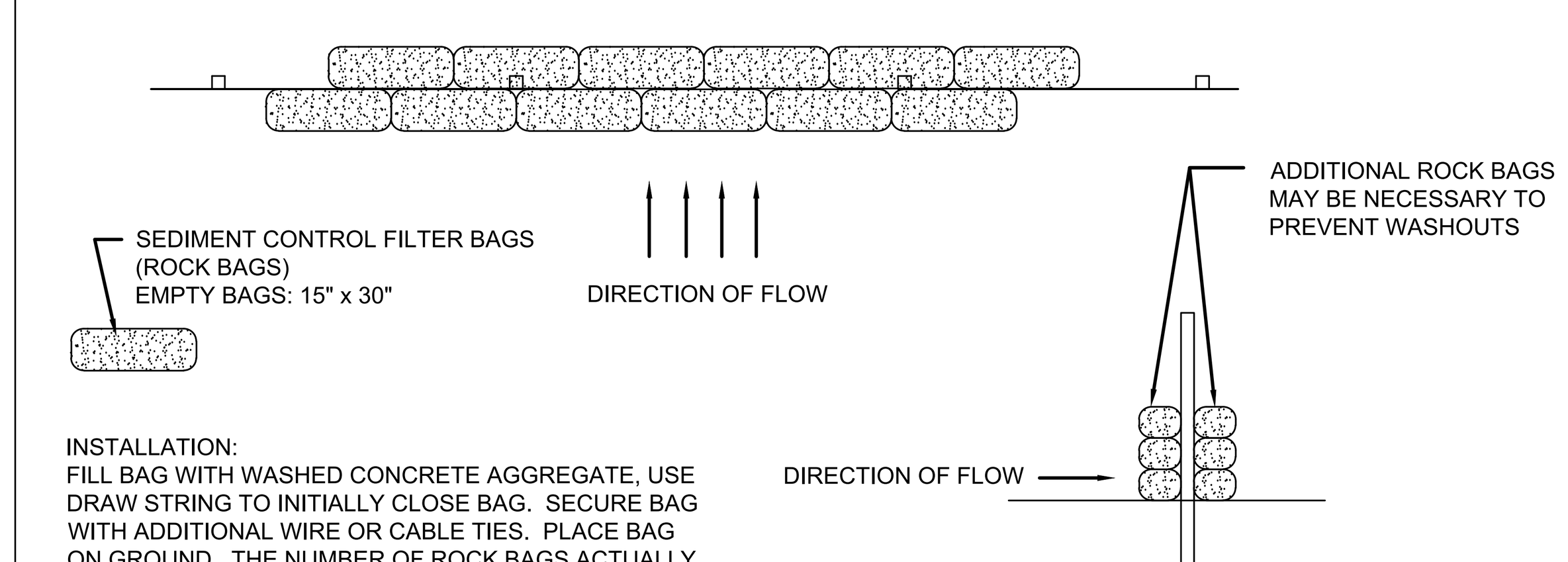
CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING TWO METHODS:
(A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, OR
(B) HOOK THE END OF EACH SILT FENCE LENGTH



TRENCH DETAIL

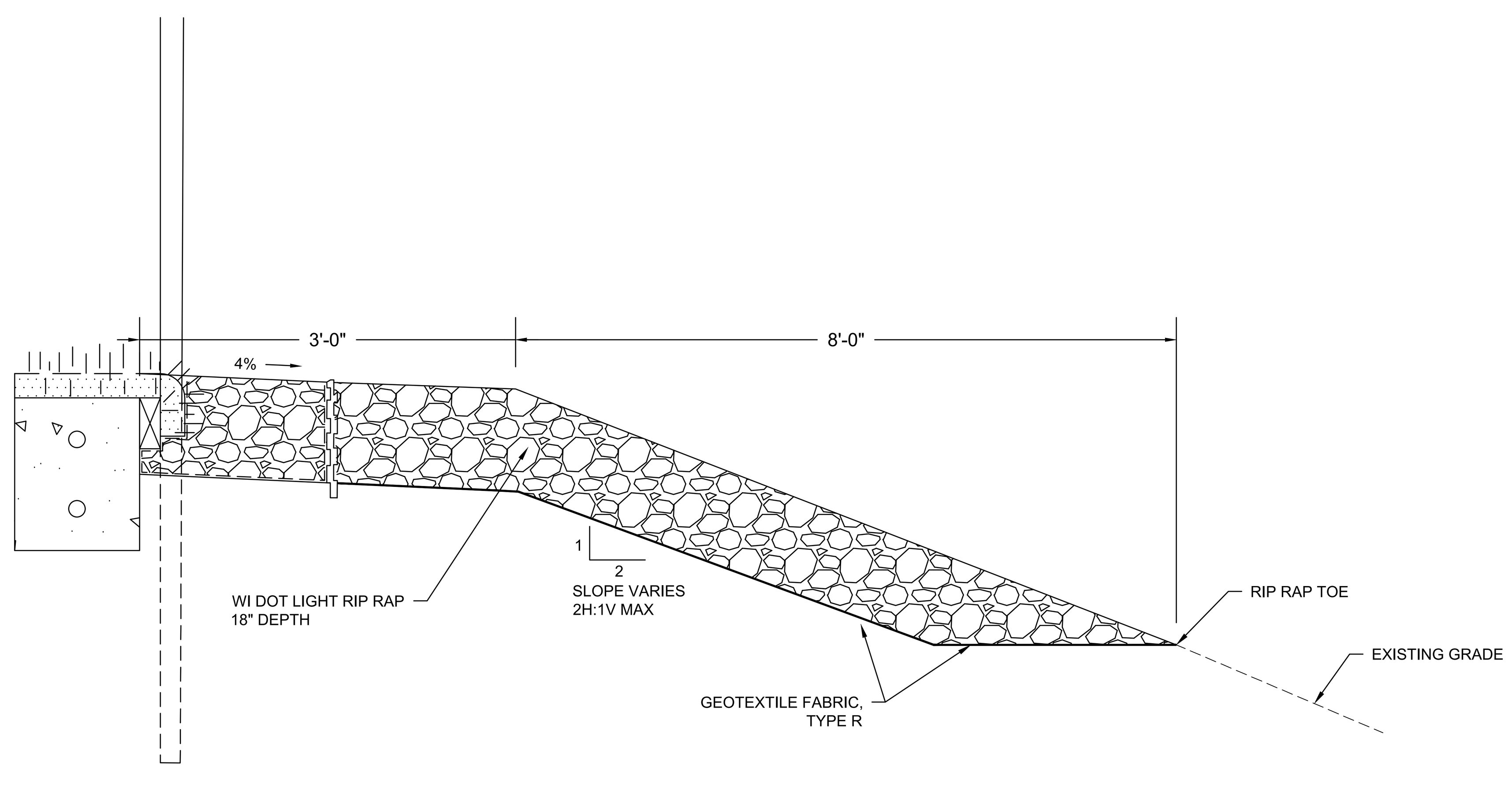
5. SILT FENCE





INSTALLATION:
FILL BAG WITH WASHED CONCRETE AGGREGATE, USE DRAW STRING TO INITIALLY CLOSE BAG. SECURE BAG WITH ADDITIONAL WIRE OR CABLE TIES. PLACE BAG ON GROUND. THE NUMBER OF ROCK BAGS ACTUALLY USED WILL VARY WITH OPENING SIZE.

6. SILT FENCE OUTLET



NOTES:

- EXCAVATE NATIVE SOIL TO MATCH TOP OF 18" DEEP RIP RAP TO EXISTING GRADE AT TOE OF RIP RAP SLOPE
- MAINTAIN A MINIMUM 5' UNDISTURBED BARRIER FROM RIP RAP TOE TO DELINEATED WETLAND BOUNDARY

7. RIP RAP SLOPE

AYRES
Green Bay, WI 54304
920.498.1200
AA #23-1948.40

Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

Sheet Title: SITE CONSTRUCTION DETAILS

Revisions:

No.	Date:	Description:

Graphic Scale 0' 5' 10' 20' 30'

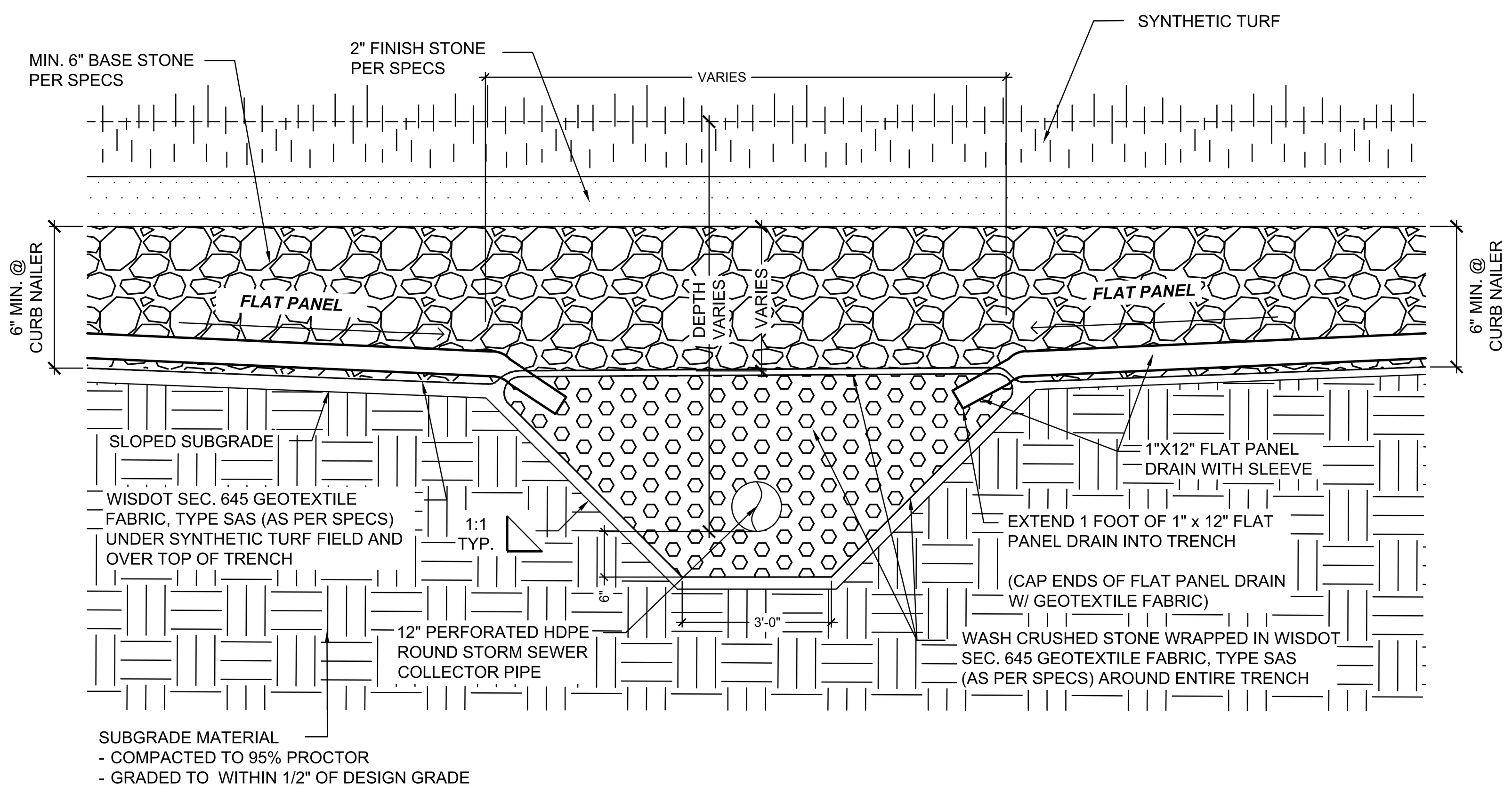
UWSA Number F-25-001

Set Type SD

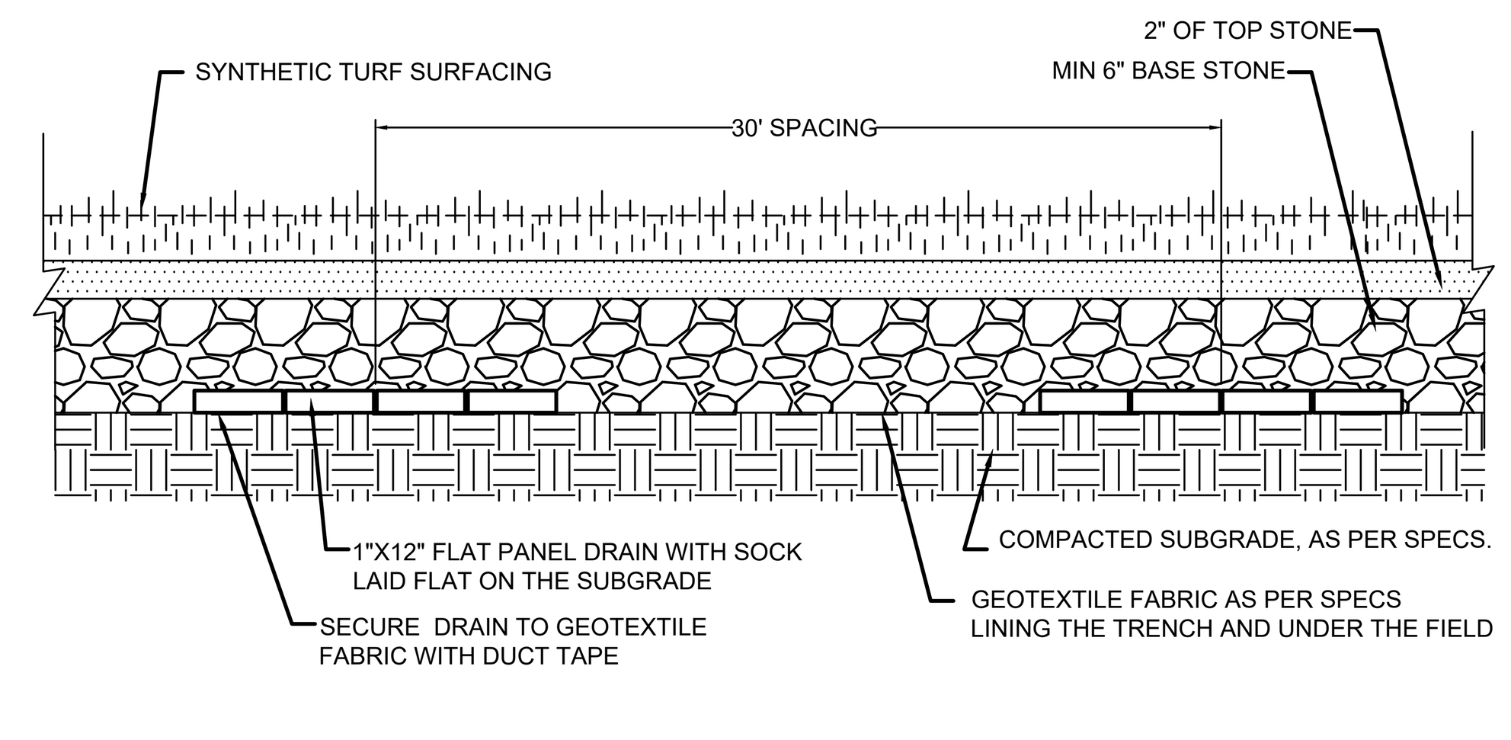
Date Issued 05/15/2026

Sheet Number C603

NOTE:
- WHERE THE INFIELD FINISH GRADE IS FLAT AND WHERE THE FLAT PANEL RUNS PARALLEL TO THE CONTOUR, GRADE THE SUBGRADE SO THAT THE FLAT PANEL LAYING ON TOP OF THE SUBGRADE HAS A MINIMUM SLOPE OF 0.30%.
- SEE SHEET C400 FOR THE FINISH GRADE CONTOURS OF THE BASEBALL FIELD.

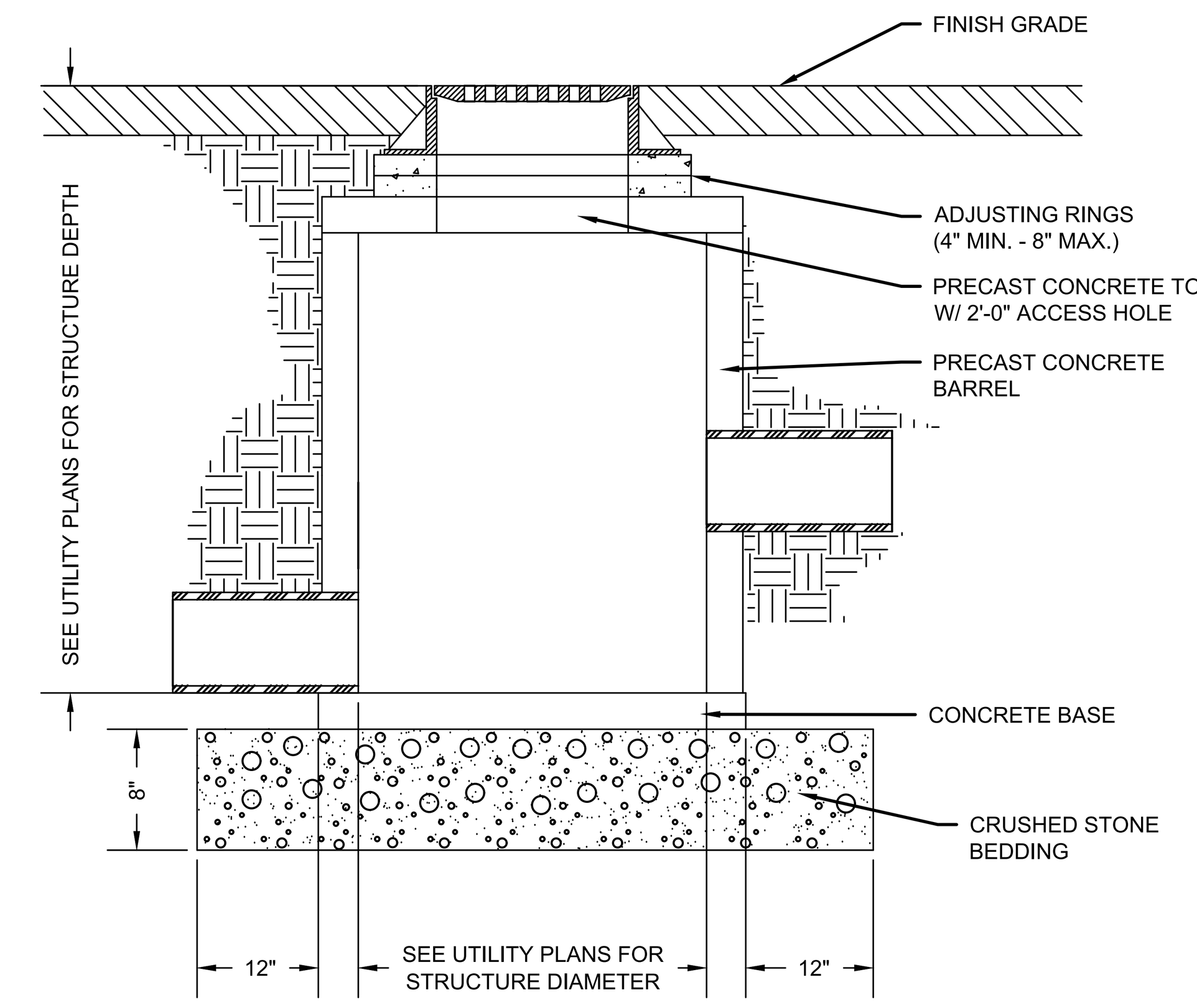


1. PERFORATED STORM PIPE COLLECTOR TRENCH



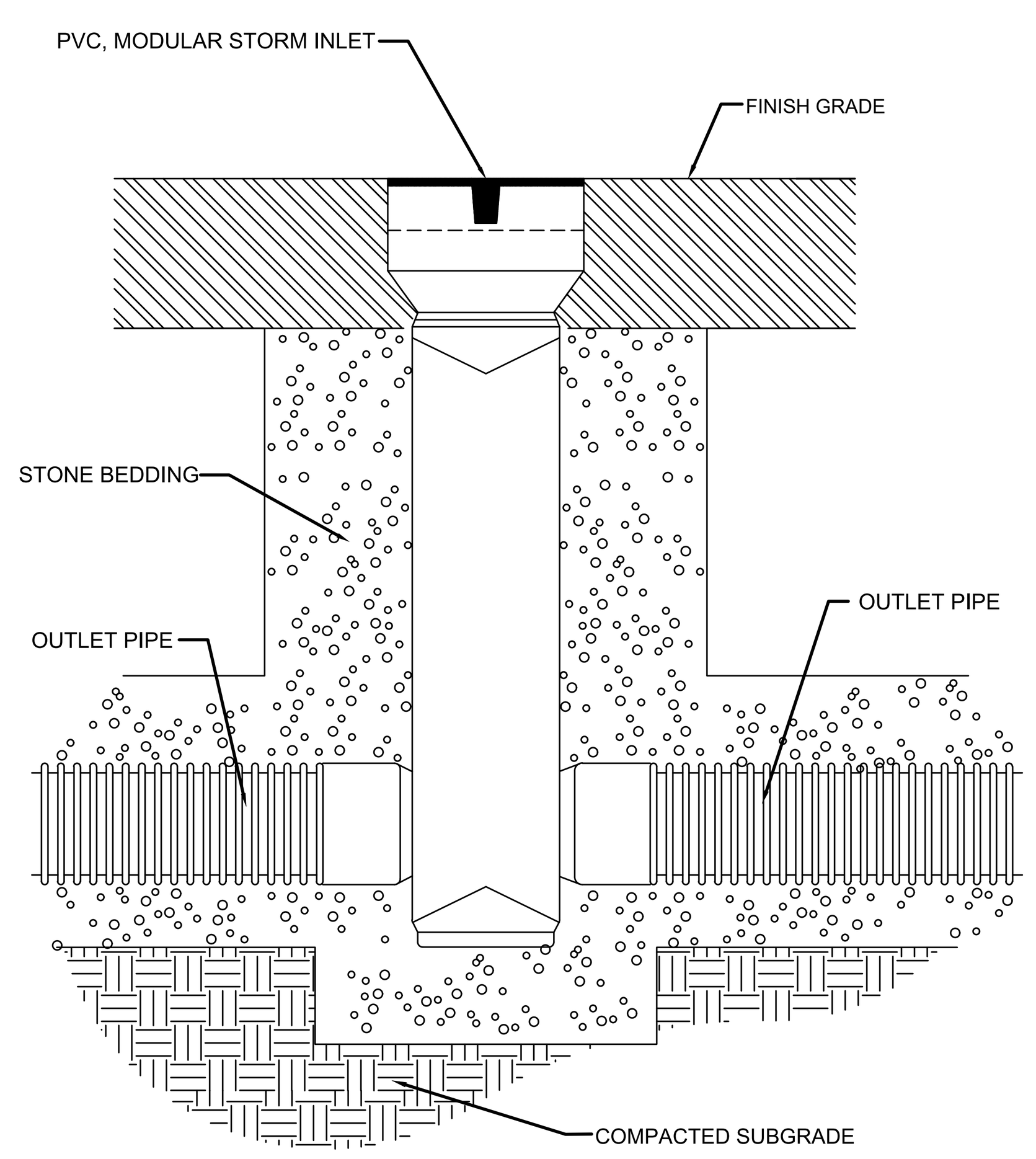
NOTE:
- SEE SITE UTILITY PLAN SHEETS FOR FLAT PANEL DRAIN SLOPE (SLOPE MUST EXCEED 0.35%)

2. 1"X12" FLAT PANEL LAYOUT



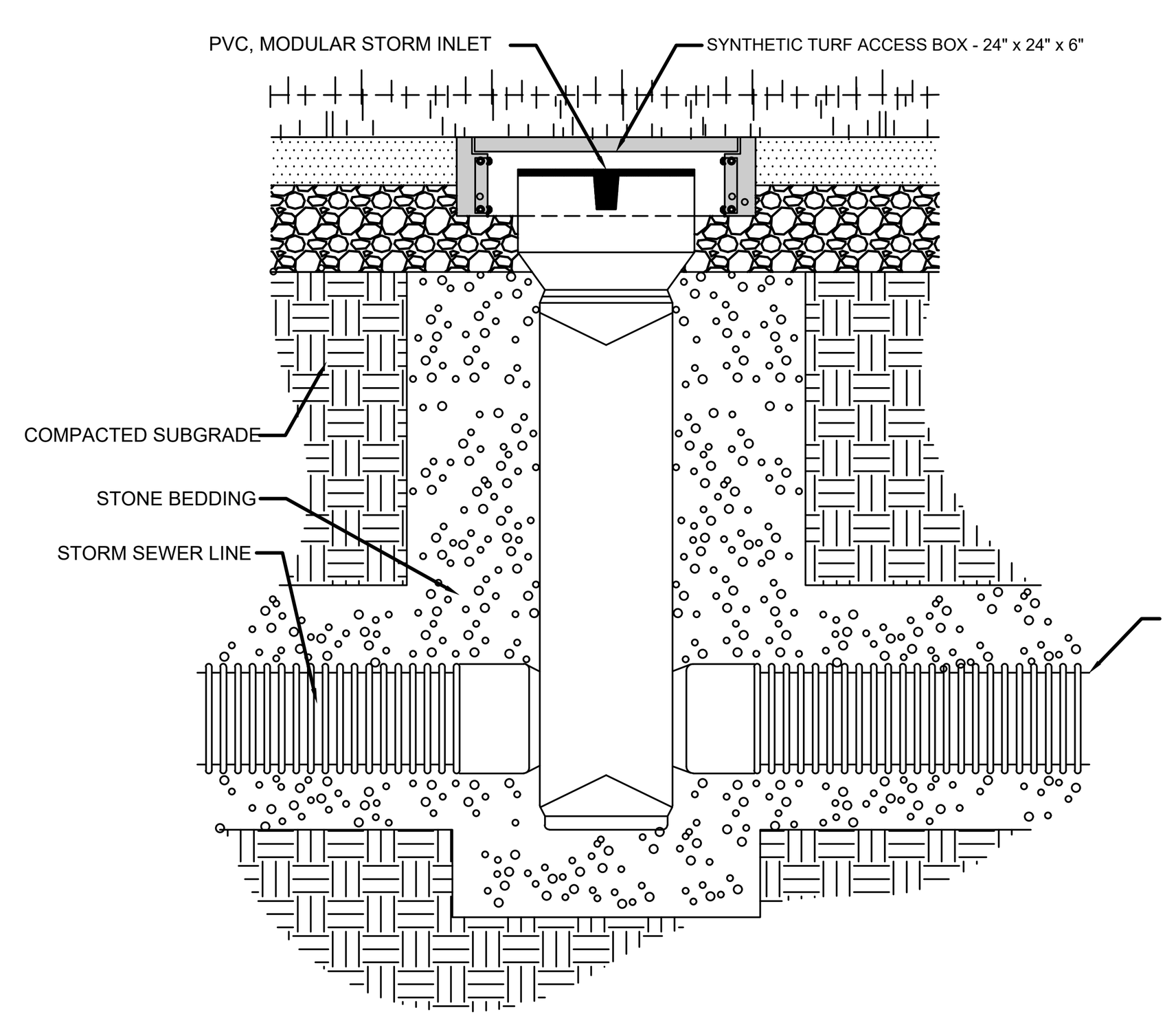
GENERAL NOTES:
- SEE UTILITY PLANS FOR STORM STRUCTURE INFORMATION.
- SEE MANUFACTURER'S SPECIFICATIONS FOR CONCRETE BASE THICKNESS.
- SEE MANUFACTURER'S SPECIFICATIONS FOR PROPER STORM STRUCTURE INSTALLATION.

3. CONCRETE STORM STRUCTURE



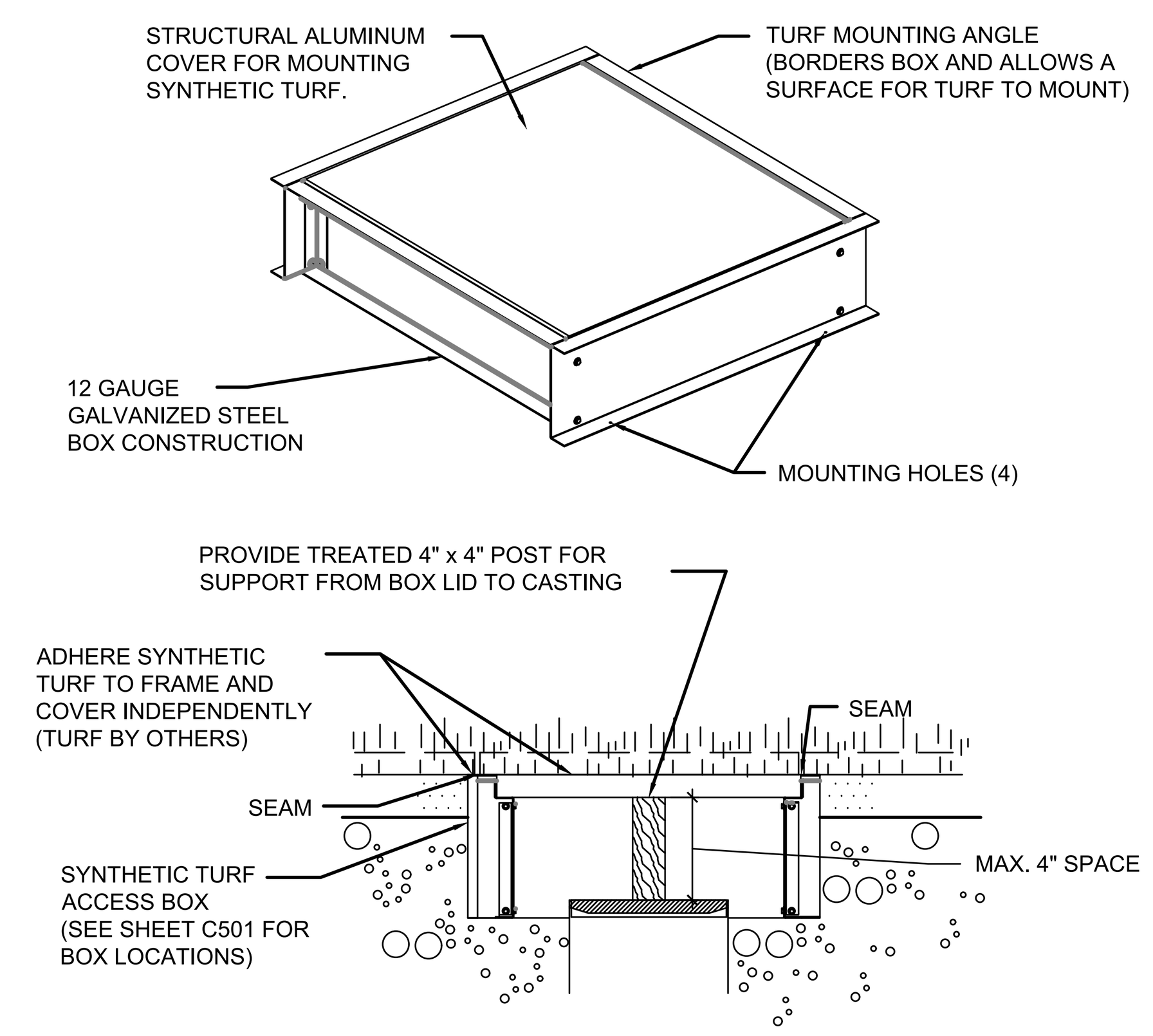
GENERAL NOTES:
- SEE UTILITY PLANS FOR STORM STRUCTURE INFORMATION.
- SEE MANUFACTURER'S SPECIFICATIONS FOR PROPER STORM STRUCTURE INSTALLATION.
- ALL MODULAR STORM INLETS SHALL HAVE 6" SUMP UNLESS NOTED OTHERWISE ON UTILITY PLANS.

4. MODULAR STORM INLET

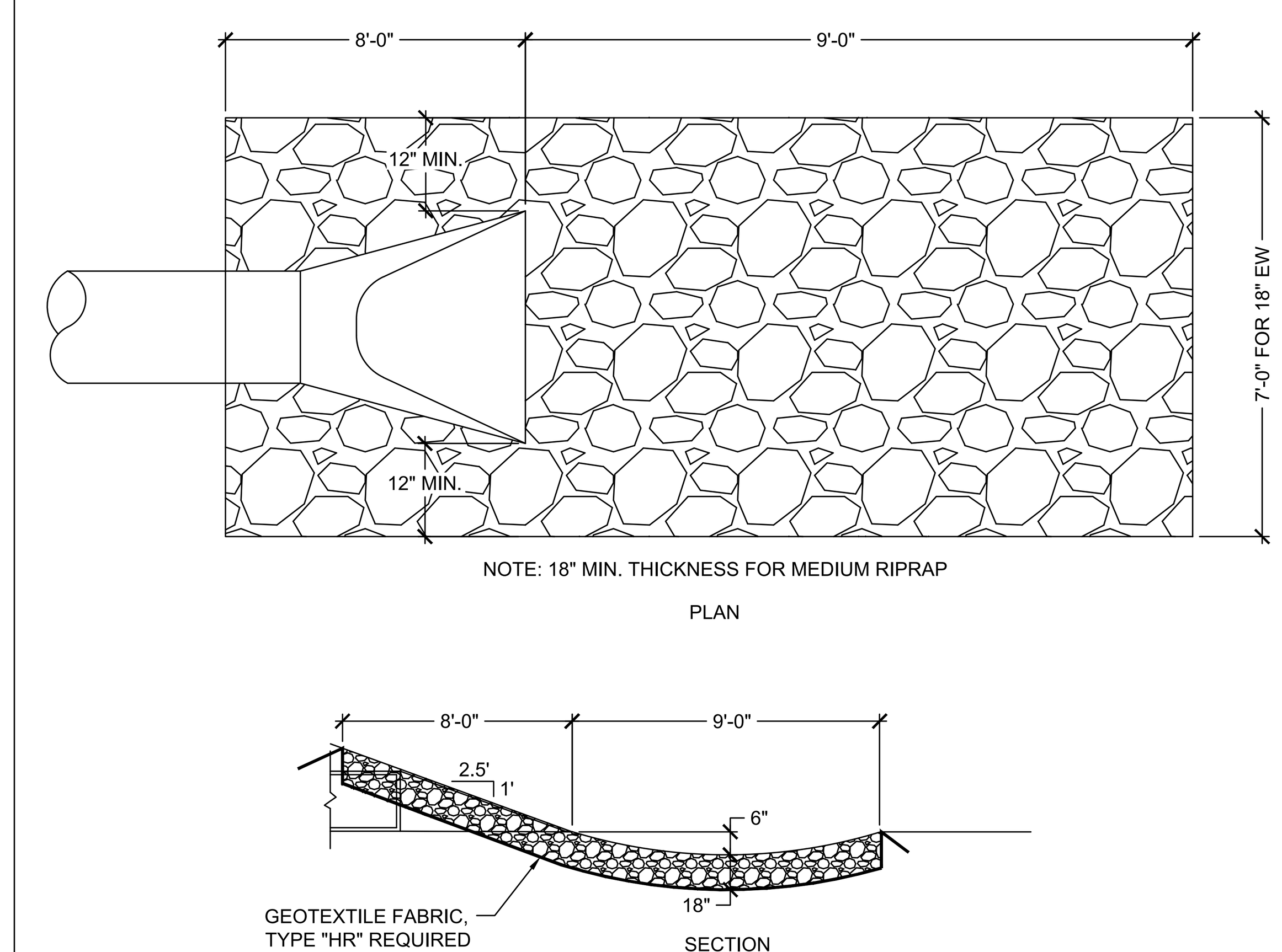


GENERAL NOTES:
- SEE STORM SEWER PLAN FOR GRATE AND PIPE INVERT ELEVATIONS
- SEE MANUFACTURER'S SPECIFICATIONS FOR PROPER BASIN & TURF BOX INSTALLATION

5. MODULAR STORM INLET W/ SYNTHETIC TURF ACCESS BOX



6. SYNTHETIC TURF ACCESS BOX - PVC BASIN



7. APRON ENDWALL W/ MEDIUM RIPRAP

AYRES
Green Bay, WI 54304
920.498.1200
AA #23-1948.40

Consultant:
RETTLER corporation

UWO Baseball Field Improvements
University of Wisconsin – Oshkosh
Oshkosh, Wisconsin

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Revisions:

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Graphic Scale 0' 5' 10' 20' 30'

UWSA Number	F-25-001
Set Type	SD
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Sheet Number	C604

Appendix C

Existing Environment Research

NEPA Assist Map

Environmental Impact Assessment · UW-Oshkosh Titan Athletic Complex

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
Project 23-1948.40 • 6.2.2026

WDNR BRRTS Map

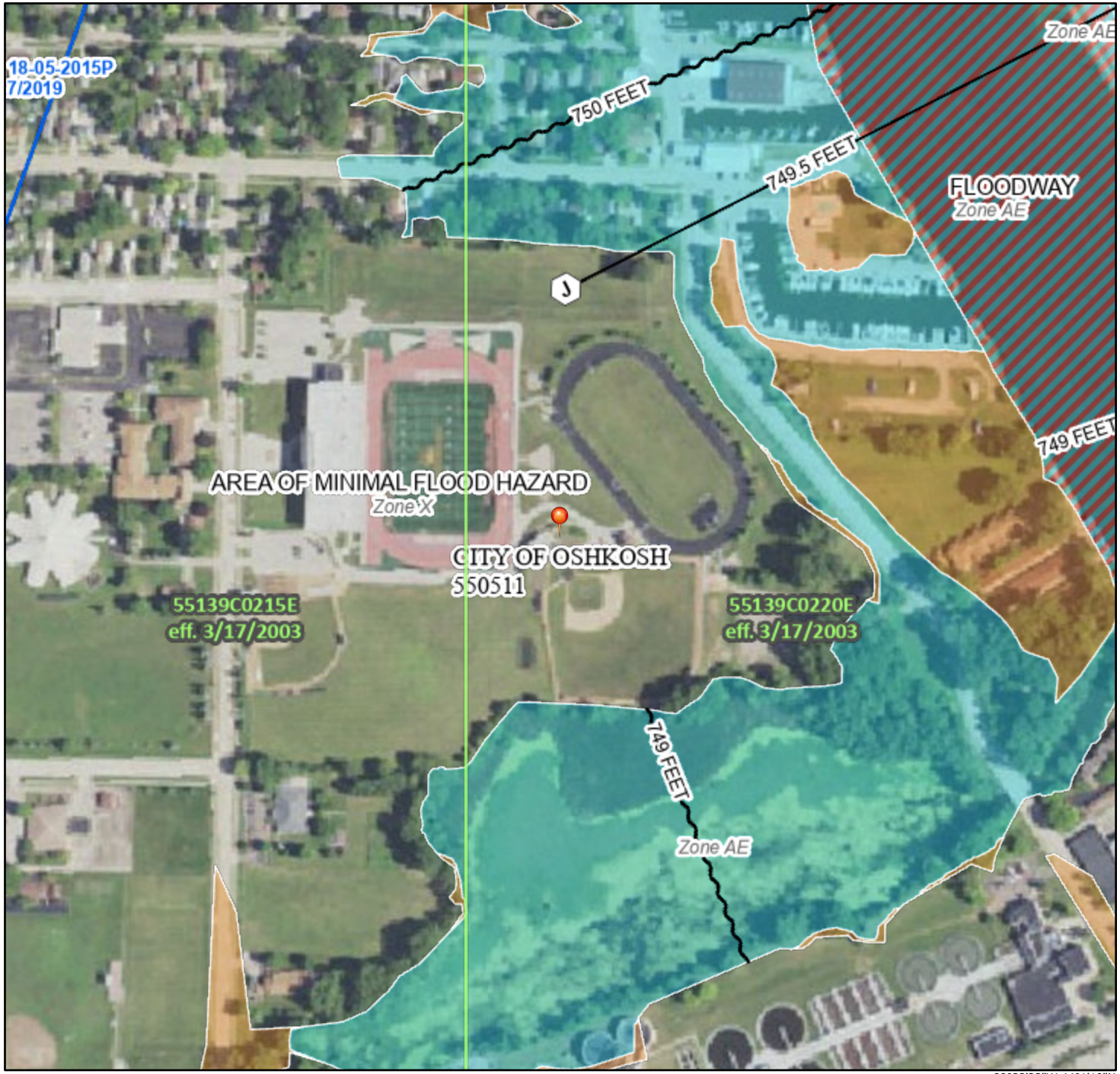
Environmental Impact Assessment · UW-Oshkosh Titan Athletic Complex

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
Project 23-1948.40 • 6.2.2026

National Flood Hazard Layer FIRMette

FEMA

88°34'1"W 44°1'36"N



88°33'23"W 44°1'10"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/5/2026 at 5:39 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Legend: (some map layers may not be displayed)

- Wetland Indicators
- Wetland Class Areas
- USDA Wetspots
- Wetland Indicators
- Rivers and Streams
- Intermittent Streams
- Open Water
- 24K Lakes and Open Water

Notes:

Map projection: NAD 1983 HARN Wisconsin TM

N

Map: 0 330 660 Feet
0 90 180 Meters

Service Layer Credits:
Wetland Indicators & Soils^: Surface Water Data Viewer Team, Latest Leaf Off: , DNR: WI Lands Vector Tile Layer: , Surface Water (Cached): WiDNR, USGS, and other data, Wetland Inventory NWI (Dynamic): Calvin Lawrence, Dennis Weise, Nina Rihn

Date Printed: 11/24/2025 2:22 PM

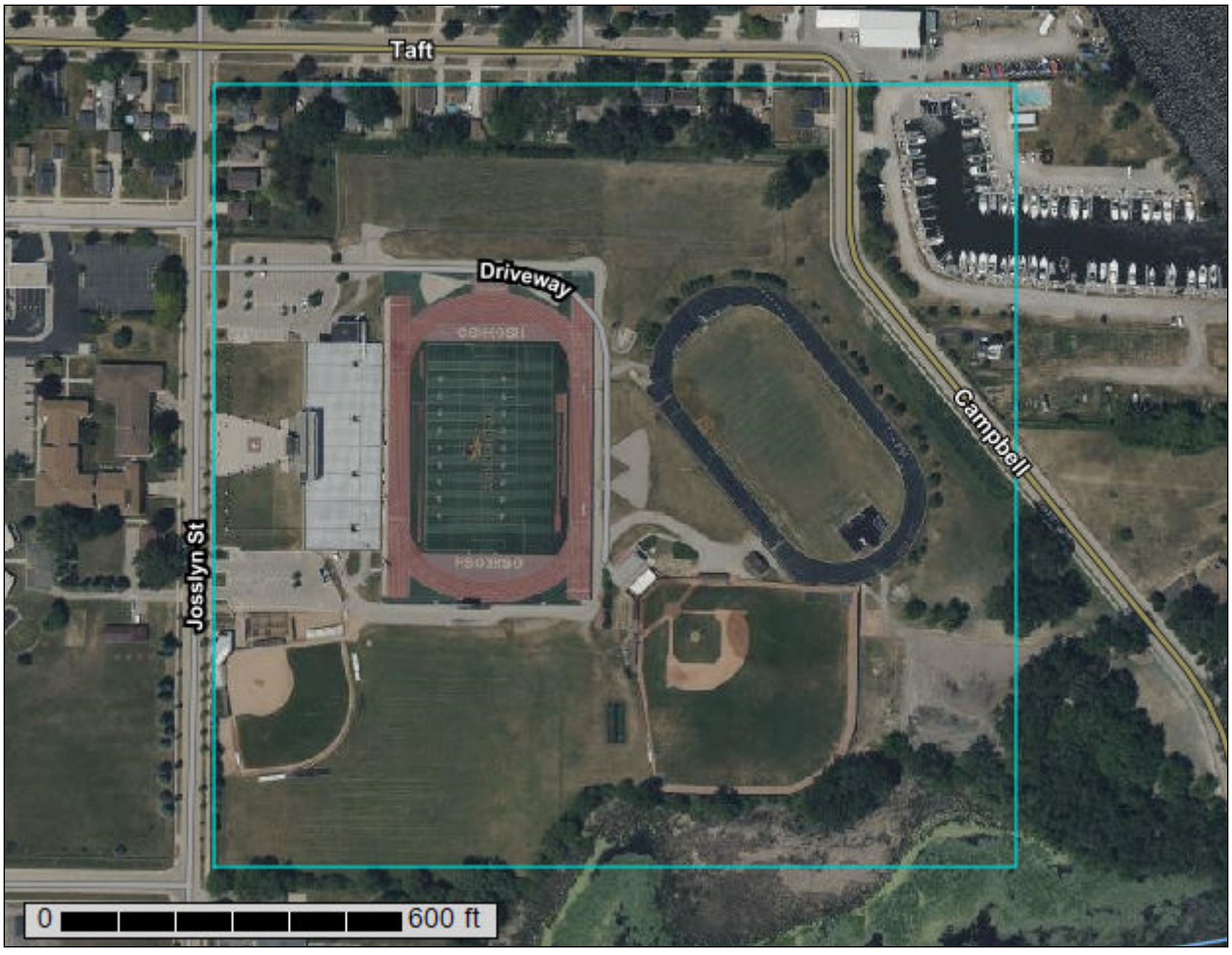
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Winnebago County, Wisconsin



November 21, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

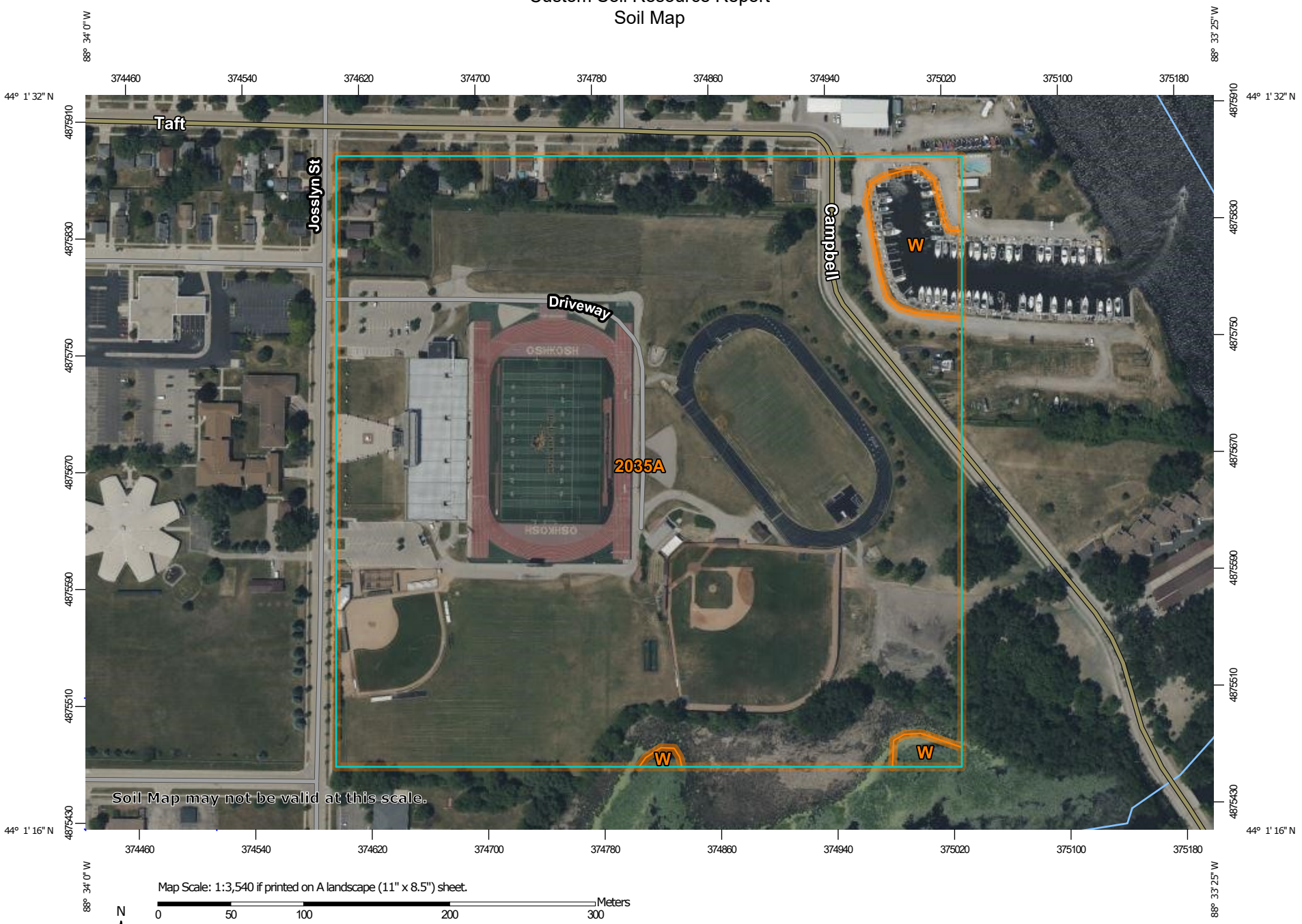
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:3,540 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Winnebago County, Wisconsin
Survey Area Data: Version 22, Sep 10, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 7, 2023—Jun 9, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2035A	Udorthents, 0 to 3 percent slopes	43.1	96.5%
W	Water	1.5	3.5%
Totals for Area of Interest		**44.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Winnebago County, Wisconsin

2035A—Udorthents, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: g5zp
Elevation: 730 to 1,000 feet
Mean annual precipitation: 28 to 34 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 135 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Typical profile

H1 - 0 to 10 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
Depth to water table: About 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F095XA006WI - Moist Loamy Lowland
Hydric soil rating: No

Minor Components

Neenah

Percent of map unit: 7 percent
Landform: Depressions
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave, linear
Ecological site: F095XA007WI - Moist Clayey Lowland
Other vegetative classification: Mod AWC, high water table (G095AY004WI)
Hydric soil rating: No

Houghton

Percent of map unit: 1 percent

Landform: Depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Not suited, flooded or organics (G095AY010WI)
Hydric soil rating: Yes

Menasha

Percent of map unit: 1 percent
Landform: Depressions on stream terraces, depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F095XA004WI - Wet Loamy or Clayey Lowland
Other vegetative classification: Mod AWC, high water table (G095AY004WI)
Hydric soil rating: Yes

Kingsville

Percent of map unit: 1 percent
Landform: Depressions, depressions on outwash plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F095XB004WI - Wet Loamy or Clayey Lowland
Other vegetative classification: Mod AWC, high water table (G095AY004WI)
Hydric soil rating: Yes

W—Water

Map Unit Setting

National map unit symbol: g5zq
Elevation: 730 to 1,000 feet
Mean annual precipitation: 28 to 34 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 135 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

References

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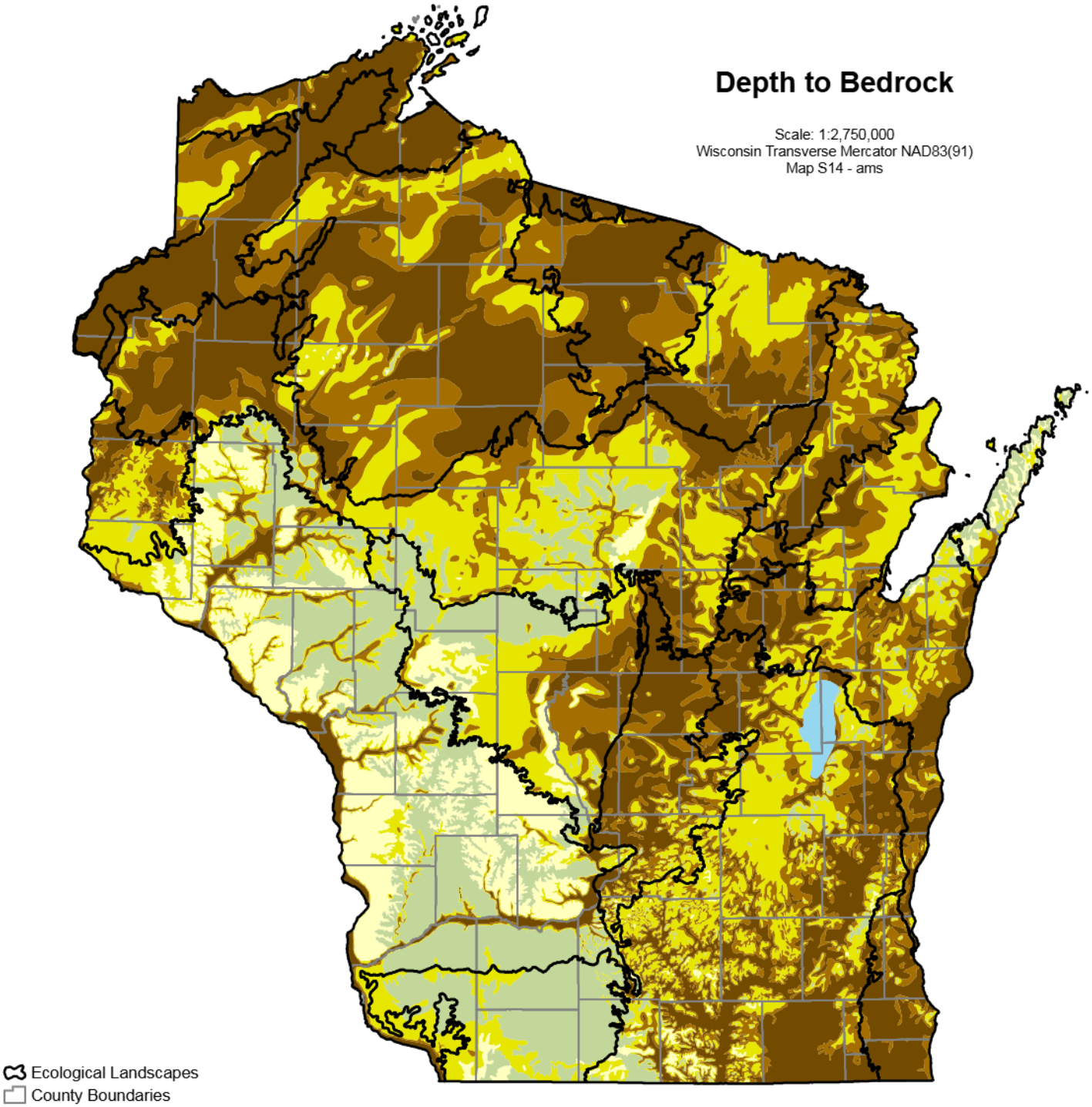
United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Depth to Bedrock

Scale: 1:2,750,000
Wisconsin Transverse Mercator NAD83(91)
Map S14 - ams



Ecological Landscapes
County Boundaries

Depth to Bedrock

- 35% to 70% of the area has bedrock within 5 feet of the land surface
- Greater than 70% of the area has bedrock within 5 feet of the land surface
- Bedrock is between 50 feet and 5 feet of the land surface
- Bedrock is between 100 feet and 50 feet of the land surface
- Bedrock is greater than 100 feet from the land surface
- Lake Winnebago

The primary source for this data layer is a 1973 map at 1:1,000,000 scale published by the Wisconsin Geological and Natural History Survey and U.S. Geological Survey. Where more recent information was available, the USGS updated the 50-foot and 100-foot contours of the depth-to-bedrock map at a scale of 1:250,000. Soil associations data, and other information, were used to add a 5-foot contour to the data layer.

0 12.5 25 50 75 100 Miles

0 15 30 60 90 120 Kilometers

Ecological Landscapes of Wisconsin, WDNR 2015

Appendix D

Endangered Resources Review

Endangered Resources Preliminary Assessment

Created on **5/13/2026**. This report is good for one year after the created date.

DNR staff will be reviewing the ER Preliminary Assessments to verify the results provided by the Public Portal. ER Preliminary Assessments are only valid if the project habitat and waterway-related questions are answered accurately based on current site conditions. If an assessment is deemed invalid, a full ER review may be required even if the assessment indicated otherwise.

Results

A search was conducted of the NHI Portal within a 1-mile buffer (for terrestrial and wetland species) and a 2-mile buffer (for aquatic species) of the project area. Based on these search results, below are your follow-up actions.

This project is covered by the Broad Incidental Take Permit/Authorization for No/Low Impact Activities (No/Low BITP/A) (https://dnr.wi.gov/topic/ERReview/ITNoLowImpact.html) **provided that the follow-up actions below are implemented**. This BITP/A covers projects that the DNR has determined will have no impact or a minimal impact to endangered and threatened species in the state. Due to this coverage under the No/Low BITP/A, a formal review letter is not needed and only the actions listed below need to be followed to comply with state endangered species laws, any take that may result from the proposed project is permitted/authorized for state-listed species.

Follow up actions:

The project overlaps the Rusty Patched Bumble Bee High Potential Zone. The USFWS has created a Rusty Patched Bumble Bee High Potential Zone to show where there is a high likelihood for the species to be present. If a project overlaps with this zone then steps should be taken to determine if suitable habitat is present for the bee. Shapefiles and an interactive map of the zone can be found on the USFWS rusty patched bumble bee guidance page: (https://www.fws.gov/species/rusty-patched-bumble-bee-bombus-affinis)

- Suitable active season habitat includes, but is not limited to: prairies, woodlands, marshes/wetlands, agricultural landscapes and residential parks and gardens. The RPBB relies on diverse and abundant flowering plant species in proximity to suitable overwintering sites for hibernating queens.
- Suitable overwintering habitat includes, but is not limited, to: non-compacted soils, sandy soils, or woodlands. Overwintering habitat does not include wetlands.
- Non-suitable habitat includes, but is not limited to: permanently flooded areas/open water, paved areas, areas planted to annual row crops, forest where invasive shrubs are dominant and spring ephemeral flowers are absent, and areas mowed too frequently to allow development of diverse wildflower resources (e.g., road shoulders, medians, lawns).

If your project is 100% within non-suitable habitat then no further actions are necessary. However, if suitable habitat is present within the project site, assume presence and follow one or more the USFWS' recommended conservation measures below:

For prescribed fire, mowing/haying, grazing, pesticide use and tree clearing/thinning, follow the voluntary conservation measures outlined in the Conservation Management Guidelines for the Rusty Patched Bumble Bee (*Bombus affinis*)] document: ((https://www.fws.gov/media/conservation-management-technical-assistance-rusty-patched-bumble-bee))

For all other projects:

- use native trees, shrubs and flowering plants in landscaping,
- provide abundant, diverse floral foraging habitat throughout the growing season (https://www.fws.gov/media/plants-favored-rusty-patched-bumble-bee),

- remove and control invasive plants in any habitat used for foraging, nesting, or overwintering

If **none** of the above conservation measures can be followed or for more information on implementing the above conservation measures, contact the USFWS Bloomington Field Office at (952) 252-0092 or TwinCities@fws.gov for further consultation.

For more information, refer to the **Screening Guidance for the Rusty Patched Bumble Bee (RPBB):** (https://widnr.widen.net/view/pdf/ocpohchp4o/NH_ScreeningGuidance_RPBB.pdf)

This project has the potential to impact a nearby waterbody where a state special concern aquatic species may be present, therefore erosion and runoff prevention measures (https://dnr.wi.gov/topic/stormwater/standards/const_standards.html) are recommended during the course of the project to avoid impacts to aquatic species. If these follow-up actions cannot be implemented, an ER Review should be requested.

A copy of this document can be kept on file and submitted with any other necessary DNR permit applications to show that the need for an ER Review has been met. This notice only addresses endangered resources issues. This notice does not constitute DNR authorization of the proposed project and does not exempt the project from securing necessary permits and approvals from the DNR and/or other permitting authorities.

Project Information

Landowner name	**University of Wisconsin - Oshkosh**
Project address	**455 Josslyn St.**
Project description	**Titan Sports Complex baseball field turf replacement**

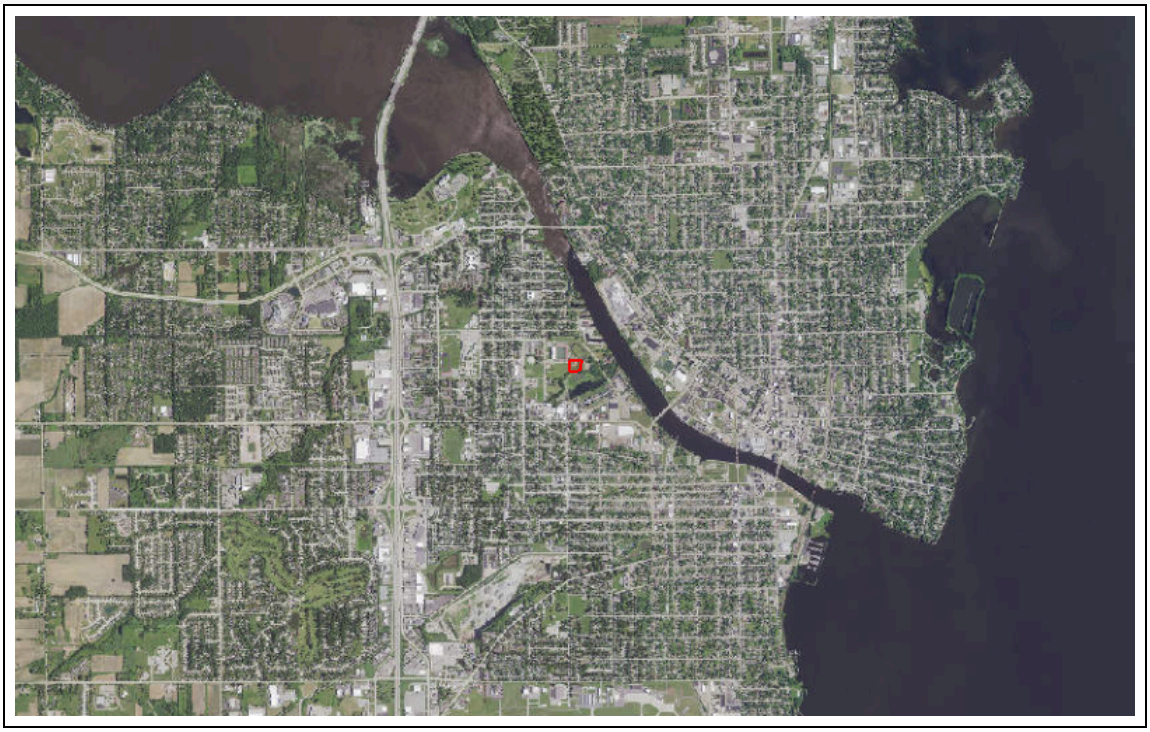
Project Questions

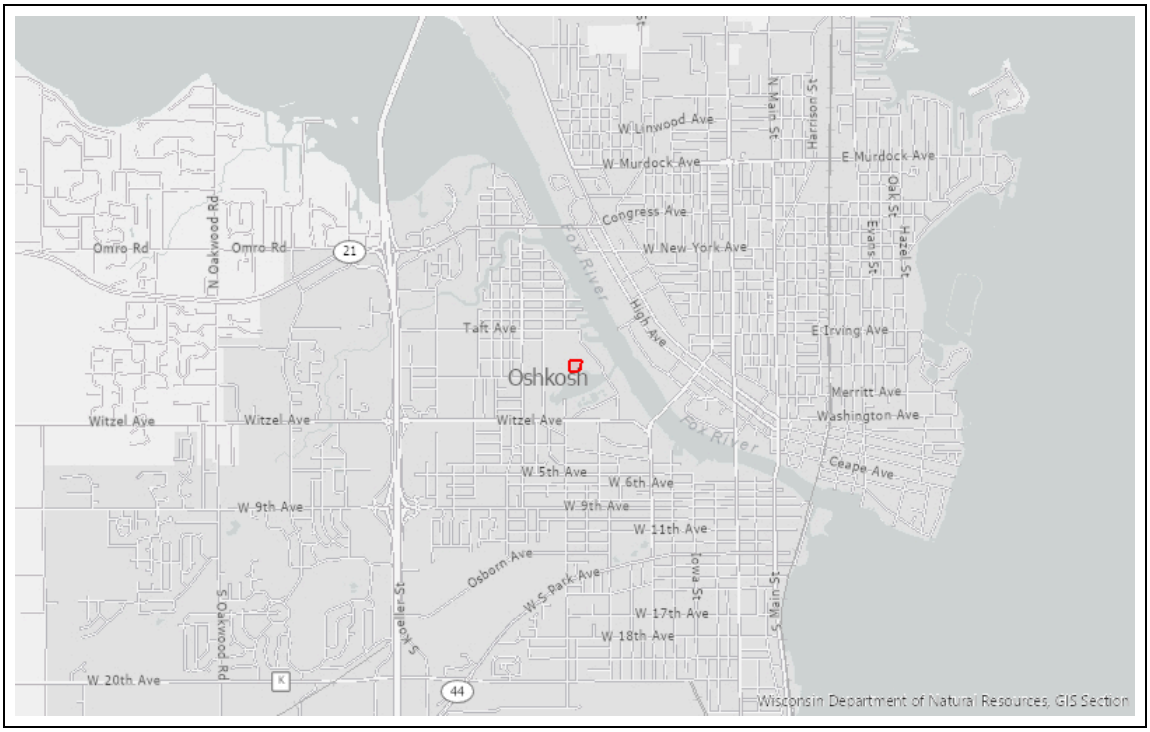
Does the project involve a public property?	**Yes**
Is there any federal involvement with the project?	**No**
Is the project a utility, agricultural, forestry or bulk sampling (associated with mining) project?	**No**
Is the project property in Managed Forest Law or Managed Forest Tax Law?	**No**
Project involves tree or shrub removal?	**No**
Is project near (within 300 ft) a waterbody or a shoreline?	**Yes**
Is project within a waterbody or along the shoreline?	**No**

Does the project area (including access routes, staging areas, laydown yards, select sites, source/fill sites, etc.) occur **entirely within** one or more of the following habitats?

Urban/residential	**Yes**
Manicured lawn	**Yes**
Artificial/paved surface	**Yes**
Agricultural land	**No**
Areas covered in crushed stone or gravel	**No**

Project Area Maps





Appendix E

Document Distribution List

Environmental Impact Assessment Document Distribution List
Tiedemann Baseball Field Upgrade University of Wisconsin-Oshkosh
Project #F-25-001

Organization & Contact Name	Position	Address Line 1	Address Line 2	City	State	Zip	E-mail Address		DEIS	FEIS	ROD
Universities of Wisconsin System											
Deej Lundgren	Associate Vice President	780 Regent St.	Suite 239	Madison	WI	53715	deeg.lundgren@wisconsin.edu		E		
Cathy O'Hara Weiss	Dir. Facility Planning & Architecture	780 Regent St.	Suite 239	Madison	WI	53715	cathy.o.weiss@wisconsin.edu		E		
Liz Davey	Sustainability Coordinator	780 Regent St.	Suite 239	Madison	WI	53715	liz.davey@wisconsin.edu		E		
University of Wisconsin - Oshkosh Staff											
Corey Finkelmeyer	Vice Chancellor of Administration	800 Algoma Boulevard		Oshkosh	WI	54902	finkelmeyerc@uwosh.edu		E		
Chad Shaw	Director of Planning & Construction	650 Witzel Ave		Oshkosh	WI	54902	shawc@uwosh.edu		E		
Kurt Leibold	Director of Facilities	650 Witzel Ave		Oshkosh	WI	54902	leiboldk@uwosh.edu		E		
Brad Spanbauer	Director of Sustainability	650 Witzel Ave		Oshkosh	WI	54902	spanbauerb@uwosh.edu		E		
Andy Anaam	Campus Media Relations	800 Algoma Boulevard		Oshkosh	WI	54902	anaama@uwosh.edu		E		
University of Wisconsin - Oshkosh Student Representatives											
Sandy Yanez-Velasquez	Oshkosh Student Government President						osgdos@uwosh.edu		E		
Jesse Ramsey	Oshkosh Student Government Vice President						osgvppt@uwosh.edu		E		
Jacob Link	Editor-in-Chief, The Advance-Titan						linkj13@uwosh.edu		E		
Federal/Tribal Government Agencies											
Kanani Nunies	Oneida Nation Tribal Historic Preservation Officer	PO Box 365		Oneida	WI	54155	oneida_thpo@oneidanation.org		E		
Tehassi Hill	Chair, Oneida Nation	PO Box 365		Oneida	WI	54155	thill7@oneidanation.org		E		
Shauna Marquardt	U.S. Fish and Wildlife, Field Office Supervisor	3815 American Blvd East		Bloomington	MN	55425	shauna_marquardt@fws.gov		E		
State Elected Officials											
Governor Tony Evers	State of Wisconsin	115 East State Street		Madison	WI	53702	govinfo@wisconsin.gov		E		
Rep. Lori Palmeri	State of Wisconsin Assembly District 54	PO Box 8953		Madison	WI	53708	Rep.Palmeri@legis.wisconsin.gov		E		
Senator Kristin Dassler-Alfheim	State of Wisconsin State Senate District 18	PO Box 7882		Madison	WI	53707	sen.dassler-alfheim@legis.wisconsin.gov		E		
State Government Agencies											
Tricia Canaday	State Historic Preservation Officer - WHS	816 State Street		Madison	WI	53706	tricia.canaday@wisconsinhistory.org		E		
Anna Rossler	WDNR Endangered Resources	PO Box 7921	GEF2 DNR Central	Madison	WI	53703	anna.rossler@wi.gov		E		
Adam Mednick	WDNR WEPA Coordinator	PO Box 7921	GEF2 DNR Central	Madison	WI	53703	adamc.mednick@wisconsin.gov		E		
Winnebago County											
Gordon Hintz	County Executive	112 Otter St		Oshkosh	WI	54901	countyexec@winnebagocountywi.gov		E		
City of Oshkosh											
Rebecca Grill	City Manager	215 Church Ave	PO Box 1130	Oshkosh	WI	54903	rgrill@oshkoshwi.gov		E		
James Rabe	Director of Engineering	215 Church Ave	PO Box 1130	Oshkosh	WI	54903	jrabe@oshkoshwi.gov		E		
Jim Collins	Director of Transportation	215 Church Ave	PO Box 1130	Oshkosh	WI	54903	jcollins@oshkoshwi.gov		E		
Matt Mugerauer	Mayor						mmugerauer@oshkoshwi.gov		E		
Karl Buelow	Deputy Mayor						kbuelow@oshkoshwi.gov		E		
Joseph Stephenson	Council Member						jstephenson@oshkoshwi.gov		E		
Brad Spanbauer	Council Member						bspanbauer@oshkoshwi.gov		E		
Paul Esslinger	Council Member						pesslinger@oshkoshwi.gov		E		
Alec Lefeber	Council Member						alefeber@oshkoshwi.gov		E		
Jacob Amos	Council Member						jamos@oshkoshwi.gov		E		
Neighborhood Associations											
Liz Last	Executive Dir., Greater Oshkosh Healthy Neighborhoods						lizlast@gohni.org		E		
Local Libraries											
Polk Library	UW-Oshkosh Library	800 Algoma Blvd		Oshkosh	WI	54901			M		
Oshkosh Public Library		106 Washington Ave		Oshkosh	WI	54901			M		

E - electronic copy
M - mailed hard copy
ND - not distributed