ADDENDUM NUMBER TWO
TO
REQUEST FOR BIDS, CONTRACT DOCUMENTS, CONSTRUCTION SPECIFICATIONS AND DRAWINGS
FOR CONSTRUCTION OF

LIBERTY INDEPENDENT TROOP PARK PICKLEBALL COURTS
FOR
LIBERTY COUNTY BOARD OF COMMISSIONERS

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY INSERTING ITS NUMBER IN THE PROPOSAL. FAILURE TO DO SO MAY SUBJECT BONA FIDE PROPOSERS TO DISQUALIFICATION. THIS ADDENDUM FORMS A PART OF THE PROJECT DOCUMENTS; IT MODIFIES THEM AS FOLLOWS:

1. The proposal schedule has been updated. The following activity dates should be used in the preparation of the proposal.

Deadline for submission of questions	**August 30, 2024,**	**5:00 PM**
Deadline for submission of proposals	**September 5, 2024,**	**3:00 PM**
Selection committee concludes evaluations	**September 11, 2024,**	**TBD**
Project award	**September 19, 2024,**	**5:00 PM**

2. The attached List of Subcontractors form needs to be added to the proposal package and turned in with the proposal package that is submitted.

3. The landscape plan has been removed from the proposal package. The proposal schedule of items has been modified to remove the landscaping.

4. The contractor will budget 40 feet of 4-inch schedule 40 PVC pipe for irrigation conduit.

5. The concrete has been extended over the area previously covered by grass and sod. This area will be standard concrete with construction joints placed such that two future pickleball courts can be installed.

6. The shaded area with concrete pad has been removed from the proposal.

7. The contractor should adjust the lighting to include 12 double lights with poles and 8 single lights with poles. The wire, conduit, switches and the like should be updated as well.

8. The attached revised plans should be used for the preparation of the proposal.

9. The attached revised schedule of items should be used for the preparation of this proposal.

REQUEST FOR PROPOSALS – LIBERTY INDEPENDENT TROOP PARK PICKLE BALL COURTS
FOR LIBERTY COUNTY BOARD OF COMMISSIONERS

LIST OF SUBCONTRACTORS

I _____/DO, _____/DO NOT, proposed to subcontract some of the work on this project. I proposed to subcontract work to the following subcontractors.

(IF NO SUBCONTRACTORS WILL BE USED, PLEASE MARK "N/A" BEFORE RETURNING)

SUBCONTRACTOR NAME	ADDRESS:	DESCRIPTION OF WORK/SERVICES TO BE PERFORMED:	PROPOSAL AMOUNT:

PRIME CONTRACTOR NAME: _____

SCHEDULE OF ITEMS
LIBERTY INDEPENDENT TROOP PARK PICKLEBALL COURTS

TRL JOB #: 2024-40

		QUANTITY		COST	
ITEM	**DESCRIPTION**	**NUMBER OF UNITS**	**UNIT MEASURE**	**PER UNIT**	**TOTAL COST**
1	Site Grading	1	SUM		
2	Sanitary Manhole Doghouse 0-6'	1	EA		
3	Sanitary Manhole Verticle Riser	6	VF		
4	Sanitary Manhole Inside Drop	1	SUM		
5	8" PVC Sewer Main	284	LF		
6	6" Concrete Pavement	235	SY		
7	5' Sidewalk, 4" Thick 3000psi	95	SY		
8	Court Surfacing and Striping	5280	SF		
9	Net Posts, Net and Appurtenances	6	SET		
10	4' Vinyl Coated Chainlink Fence	84	LF		
11	8' Vinyl Coated Chainlink Fence	580	LF		
12	Double 4'x7' Vinyl Coated Entry Gate	1	EA		
13	Single 4'x7' gate	1	EA		
14	PVC Sleeves for Irrigation	1	SUM		
15	Court Lighting and Electrical Complete	1	SUM		
16	Black Asphalt Seal Coating	1500	SF		
17	Handicap Parking Striping	1	SUM		
18	Parking Lot Striping	1	SUM		
19	Handicap Parking Signs w/Van Parking	2	EA		
20	No Vehicle Beyond Signs	2	EA		
21	Construction Exit (Co)	1	EA		
22	Silt fence Type NS (Sd1-NS)	850	LF		
23	Concrete Washout (CSW)	1	EA		
24	Tree Protection Fence (Tr)	50	LF		
25	Permanent Grassing (Ds3)	0.5	AC		
26	Temporary Grass (Ds2)	0.5	AC		
27	Mulching (Ds1)	0.5	AC		
28	Mobilization Max 3%	1	SUM		

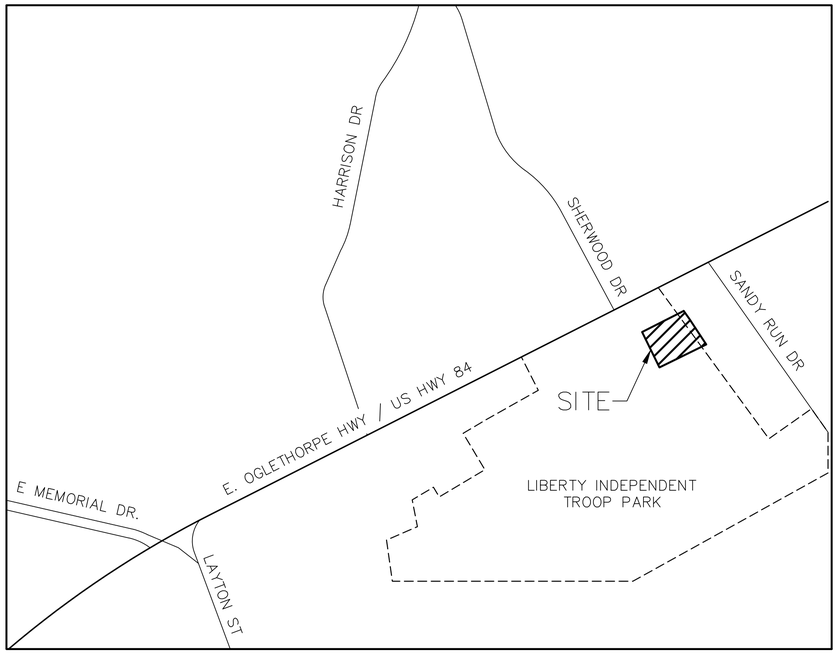
				Total-Base Bid	
	Option A				
29a	Post Tension Concrete 5"	6697.5	SF		
29b	4" Concrete, 3,000 psi	12502.5	SF		
				Grand Total-Base Bid & Option A	
GRAND TOTAL IN WORDS OPTION A					
	Option B				
30a	Post Tension Concrete 5"	11126.25	SF		
30b	4" Concrete, 3,000 psi	8073.75	SF		
				Grand Total-Base Bid & Option B	
GRAND TOTAL IN WORDS OPTION B					
	Option C				
31a	Reinforced Concrete Slab 5", 4000psi	11126.25	SF		
31b	4" Concrete, 3,000 psi	8073.75	SF		
				Grand Total-Base Bid & Option C	
GRAND TOTAL IN WORDS OPTION C					

SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK
HINESVILLE, GEORGIA

OWNER
LIBERTY COUNTY
112 N MAIN STREET
HINESVILLE, GEORGIA 31313
(912) 876-2164

24-HOUR CONTACT
TRENT R. LONG
(912)-610-1294
TRLONG@TRLONGENG.COM

Sheet List Table	
Sheet Number	Sheet Title
C1.1	COVER SHEET
C1.2	GENERAL NOTES
C2.1	DEMOLITION PLAN
C3.1	STAKING PLAN
C4.1	GRADING & DRAINAGE PLAN
C5.1	UTILITY PLAN
C7.1	EROSION CONTROL PLAN (INITIAL)
C7.2	EROSION CONTROL PLAN (INTERMEDIATE)
C7.3	EROSION CONTROL PLAN (FINAL)
C7.4	EROSION CONTROL NOTES
C7.5	EROSION CONTROL NOTES
C7.6	EROSION CONTROL DETAILS
C7.7	EROSION CONTROL DETAILS
C8.1	COURT DETAILS
C8.2	COURT DETAILS
C8.3	SITE DETAILS
C8.4	SITE DETAILS
E1.1	SITE LIGHTING PLAN



VICINITY MAP N.T.S.

LOCATION: N31° 50' 58.87", W81° 35' 01.89"
(N31.849686, W-81.583858)
DISTURBED ACREAGE: 0.80 AC.
TOTAL SITE ACREAGE: 35.00 AC.

DRAWING LEGEND

DESCRIPTION	PROPOSED	EXISTING
RIGHT OF WAY	R/W	R/W
EDGE OF PAVEMENT		
DITCH CENTERLINE		
SANITARY SEWER	8"S	
WATER LINE	10"W	10"W
FORCE MAIN	FM	FM
UNDERGROUND GAS LINE	8"G	8"G
CONTOURS	81	81
STORM DRAINAGE PIPE		
ELEVATION	FG: 78.15	X 81.90
SILT FENCE NON-SENSITIVE	Sd1-NS	
SILT FENCE SENSITIVE	Sd1-S	
INLET PROTECTION	Sd2-F	
CHECK DAM- HAY BALE	Cd-Hb	
CHECK DAM - RIP RAP	Cd-Rp	
CONSTRUCTION EXIT	Co	
STORM OUTLET PROTECTION	St	
SILT FENCE		
MULCHING	Ds1	
TEMPORARY GRASSING	Ds2	
PERMANENT GRASSING	Ds3	
FIRE HYDRANT		
SEWER MANHOLE	S	S
WATER VALVE	WV	WV
DRAINAGE FLOW		
WATER METER		
BENCHMARK		
WELL	W	W
GUY POLE		
IRON PIN	SET I.P.S	FOUND I.P.F
TELEPHONE PEDESTAL		TEL
POWER POLE		

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THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CONTAINED WITHIN THIS SET OF DOCUMENTS AND SHALL REPORT ANY DISCREPANCIES TO T. R. LONG ENGINEERING, P.C. FOR IMMEDIATE RESOLUTION.

GSWCC# 0000002134

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022: CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
COVER SHEET

REVISIONS:
1. 8/19/2024
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INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C1.1

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Plotted by: kcauseway
Plotted Date: Aug 19, 2024 - 12:20pm

Paving Notes

1. All work shall comply with all applicable codes, regulations, and/or local standards imposed by local utility, city, county, and state. It is the contractor's responsibility that all the construction be in accordance with the City of Hinesville and GDOT standard details and specifications.
2. Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by AGC of American Inc., and the safety and health regulations for construction issued by the U.S. Department of Labor.
3. Contractor shall provide all necessary barricades, sufficient lights, signs and other traffic control methods as may be necessary for the protection and safety of the public and shall be provided and maintained throughout all construction adjacent to and within all roadways. Contractor shall submit traffic control plan to city for approval.
4. The contractor shall take necessary measures to separate work areas from pedestrian traffic and to insure safe pedestrian passage at all times.
5. All signs, pavement markings, and other traffic control devices shall conform to the Manual of Uniform Traffic Control Devices. A minimum clearance of two feet shall be maintained between the face of curb and any part of a traffic sign or light pole. Contractor shall coordinate installation of all signs, pavement markings, and other traffic control devices with other contractors on signs or light poles.
6. Contractor shall saw–cut to provide smooth transitions at tie–ins to existing edges of pavement and at cold joints of recently paved asphalt.
7. Joints or score marks are to be sharp and clean without showing edges of jointing tool.
8. Contractor shall saw–cut tie–ins at existing curbs as necessary to ensure smooth transitions, contractor shall saw–cut and transition to meet existing pavement as necessary and as directed by inspector to insure positive drainage. (Typical at all intersections)
9. Paving contractor shall install paper breakaway edges at cold joints or saw–cut as required to insure a straight, full–depth joint face immediately prior to installing abutting hot asphalt.
10. All dimensions are to back of curb unless indicated otherwise.
11. Contractor shall be responsible for cost of pavement replacement where utility lines are extended across existing asphalt.
12. Asphalt surface course shall be laid with the direction of traffic in all drive lanes within parking fields.
13. Base and asphalt thickness are minimum required. Refer to specifications for type of paving and base to be used.
14. All concrete shall be Class A 4000 P.S.I. unless noted otherwise. Do not pour any concrete before forms are inspected and approved by the Inspector.
15. All ramps constructed are not to exceed a slope of 1:12. All sidewalks shall not have a cross–slope greater than 1:50
16. Concrete dumpster pads to be flush with pavement unless indicated otherwise.
17. See Detail sheets for additional details on striping, signs, etc.

Inspection notes

1. Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permitte shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off–site sediment tracking. These inspections must be conducted until a notice of termination is submitted.
2. Measure and record rainfall within disturbed areas of the site that have not met final stabilization once every 24 hours except any non–working saturday, non–working sunday and non–working federal holiday. The data collected for the purpose of compliance with this permit shall be representative of the monitored activity. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.
3. Certified personnel (provided by the primary permittee) shall inspect the following at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 pm on any friday or on any non–working saturday, non–working sunday or any non–working federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with part iv.d.4.a.(4). These inspections must be conducted until a notice of termination is submitted.
4. Certified personnel (provided by the primary permittee) shall inspected at least once per month during the term of this permit (i.e., until a notice of termination has been submitted) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).
5. Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the erosion, sedimentation and pollution control plan, the plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.
6. A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the erosion, sedimentation and pollution control plan and actions taken in accordance with part iv.d.4.a.(5) of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a notice of termination is submitted to epd. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have been properly installed and/or maintained as described in the plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the erosion, sedimentation and pollution control plan. The report shall be signed in accordance with part v.g.2. Of this permit

Site Grading Notes

1. Dimensions on buildings are for grading purposes only and are not to be used to lay–out footings. Refer to Structural Drawings for foundation information.
2. Grading contractor shall notify and cooperate with all utility companies or firms having facilities on or adjacent to the site before disturbing, altering, removing, relocating, adjusting or connecting to said facilities. Contractor shall pay all costs in connection with the alteration of or relocation of the facilities. Contractors shall raise or lower tops of existing manholes to remain as required to match finished grades.
3. Grading contractor shall cooperate and work with all other contractors performing work on this project to insure proper and timely completion of this project.
4. The grading contractor shall use whatever measures are required to prevent silt and construction debris from flowing onto adjacent properties. Contractor shall comply with all local erosion, conservation, and siltation ordinances. Contractors shall remove all temporary erosion control structures upon completion of permanent drainage facilities and not before the establishment of a stand of grass sufficient to prevent erosion.
5. For any work on the state or city right–of–way, the grading contractor shall:
   A. Not store material, excess dirt, or equipment in the right–of–way. The pavement shall be kept free from any mud or excavation waste from trucks or other equipment. On completion of the work, all excess material shall be removed from the right–of–way.
   B. Provide all necessary and adequate safety precautions such as signs, flags, light barricades, and flag–men as required by the local authorities and in accordance with solely responsible for and hold harmless the City, State, Architect, Engineer, and Owner from any claims for damage done to existing private property, public utilities, or to the traveling public.
   C. Complete work to the satisfaction of the City Public Works Department and obtain a letter from the Department stating that the work is acceptable.
7. Grading contractor shall take all available precautions to control dust. Contractor shall control dust by sprinkling, or by other methods as directed by Engineer and/or Owner's representative, at no additional cost to Owner.
8. Site grading contractor shall terminate all storm drain pipes five feet maximum from building unless otherwise noted.
9. Storm sewer lead–ins to building shall not be installed until building plans are completed and locations established on the architectural plans. Lead–ins may change 15' horizontally and 3' vertically prior to installation at no additional cost to the owner. Contractor shall request and receive written approval from prime contractor prior to installation of lead–ins. Contractor shall coordinate locations, size, and invert elevations of storm sewers with approved building plumbing plans.
10. All excavating is unclassified and shall include all materials encountered.
11. Before any machine work is done, contractor shall stake out and mark the items established by the site plan, control points shall be preserved at all times during the course of the project. Lack of proper working points and grade stakes may require satisfaction owner must approved staked items prior to construction.
12. Temporary erosion control devices to be installed prior to beginning of grading. Contractor shall maintain all temporary erosion control devices and shall remove silt contractor at least once a week.
13. Contractor to coordinate all work with other utility installations not covered in these plans, (Electric, Telephone, Gas, Cable, Etc.) and allow for their operations and construction to be performed.
14. Cut and fill slopes are not to exceed 3:1 unless otherwise noted.
15. In no case shall any paved areas be less than a slope of 1.0%. All accessible sidewalks and aisle slopes not to exceed 2% cross–slope.
16. Contractor shall repair or replace in–kind any damage that occurs as result of his work.
17. All linear footage for all utility pipes are approximate, actual installed quantities may vary.
18. Grading contractor shall restore to grade and compaction all areas disturbed by building construction prior to base and paving operations commencing.
19. Grading contractor shall maintain all weather construction access roads as required by general contractor.

Site Utility Notes

1. The site utility plan is for sanitary sewer and water line construction only. Do not use for grading or storm sewer construction.
2. All pipe lengths are horizontal distances and are approximate.
3. All domestic water and sanitary sewer stubs to be terminated 5 feet outside of the building unless otherwise noted. The end of these service lines shall be tightly plugged or capped and marked until such time as connection is made inside building by plumbing contractor.
4. Site utility contractor shall provide all the materials and appurtenances necessary for the complete installation of the utilities. All pipe and fittings shall be inspected by the Water Department Inspector prior to being covered. The inspector must also be present during pressure testing and disinfection of laterals and his signature of approval is required.
5. All work shall comply with all applicable codes, regulations, and/or local standards imposed by local utility and City of Hinesville.
6. The site utility contractor shall make arrangements with the local utility authorities for connection to the existing mains and pay all applicable fees.
7. All water lines shall have a minimum cover of 36" above top of pipe.
8. Contractor shall adjust location of proposed water lines as required to avoid conflicts with storm sewer or other utilities at no extra cost.
9. Based on the current edition of the international plumbing code, cleanouts are required at a maximum spacing of 100 feet on utility lead–ins to building. Contractor to provide a cleanout within 5 feet of building and at all bends.
10. The site utility contractor shall cooperate and work with all other contractors on the site.
11. All materials shall be U.L. listed and approved by the local utility company unless directed otherwise by the Engineer.
12. The existing utility facilities and locations shown on the drawings are taken from readily available information. The actual locations of the utility facilities may vary somewhat from the locations shown or indicated on the drawings. The site utility contractor shall contact all agencies with utility facilities in the vicinity of the work and shall locate all underground facilities before beginning work. The contractor shall project all utility facilities and repair any damages resulting from their work, in conformance with the contract documents and specifications and relocate if required.
13. All sanitary sewer pipe shall be SDR–26 meeting ASTM D3034 with gasket type joints meeting ASTM F477.
14. Utility lead–ins to building shall not be installed until building plans are completed and locations established on the architectural plumbing plans. Lead–ins my change 15' horizontally and 3' vertically prior to installations at no additional cost to the owner. Utility contractor shall request and receive written approval from prime contractor prior to installation of lead–ins. Location, size and invert elevations of sanitary sewer shall be coordinated with the approved plumbing plans for the building.
15. Building plumbing contractor shall pay all cost for water meters, meter boxes, valves, etc. to provide a complete job per local authority requirements.
16. Thrust blocks shall be provided at all tees, elbows, and bends of sufficient size to comply with minimum standards of N.F.P.A. – Existing soil conditions.
17. Should latent soil conditions necessitate, contractor shall install special supports for piping and/or appurtenances including the removal of unsuitable material and backfilling with gravel or other material. Contractor shall perform any such work as directed by the civil engineer and/or soils engineer at no cost to owner.
18. Contractor to coordinate all work with other utility installations not covered in these plans (Electric, Telephone, Gas, Cable, etc.) and allow for their operations and construction to be prepared.
19. The site utility contractor shall coordinate and pay for all sanitary sewer connections. Sanitary sewer connection final tie–in to the existing manhole(s) shall not be made until completion of the proposed system and all manholes have been brought above ground to insure sediment does not enter system. Lines shall be properly cleaned, if needed.
20. Site utility contractor to coordinate with irrigation contractor to provide power in conduit to irrigation controller per manufacturers recommendations. Verify exact location of controller with owner prior to installation.

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GSNWC# 0000002134

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(912) 368–6664

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 057M022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
GENERAL NOTES

REVISIONS:
1. 8/19/2024
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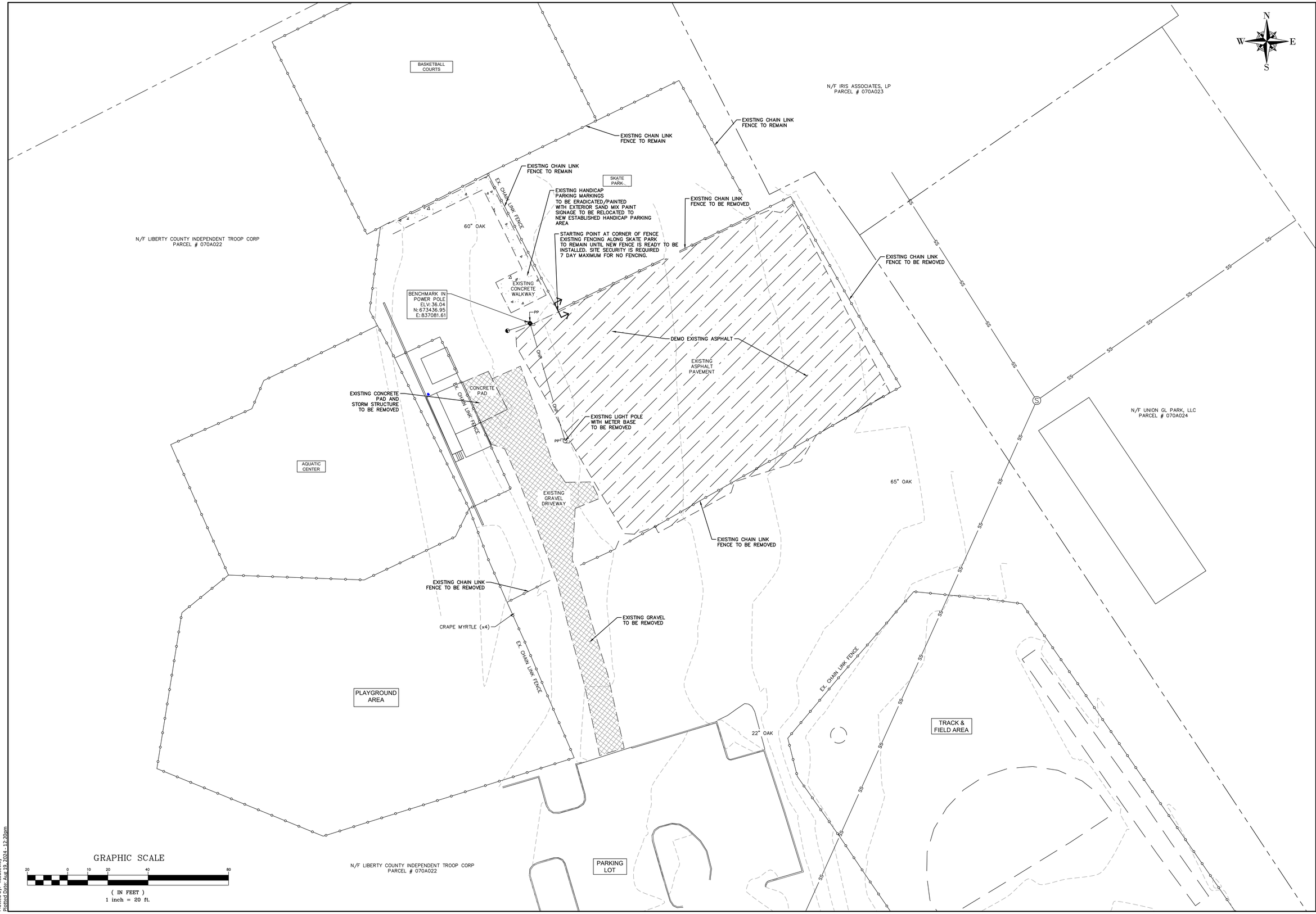
INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C1.2

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Printed By: Kevin Howe
Plotted Date: Aug 19, 2024 - 12:20pm



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Plotted By: Forrest Gowdy
Plotted Date: Aug 19, 2024 - 12:20pm

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GSWCC# 00000002134

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
DEMOLITION PLAN

REVISIONS:
1. 8/19/2024
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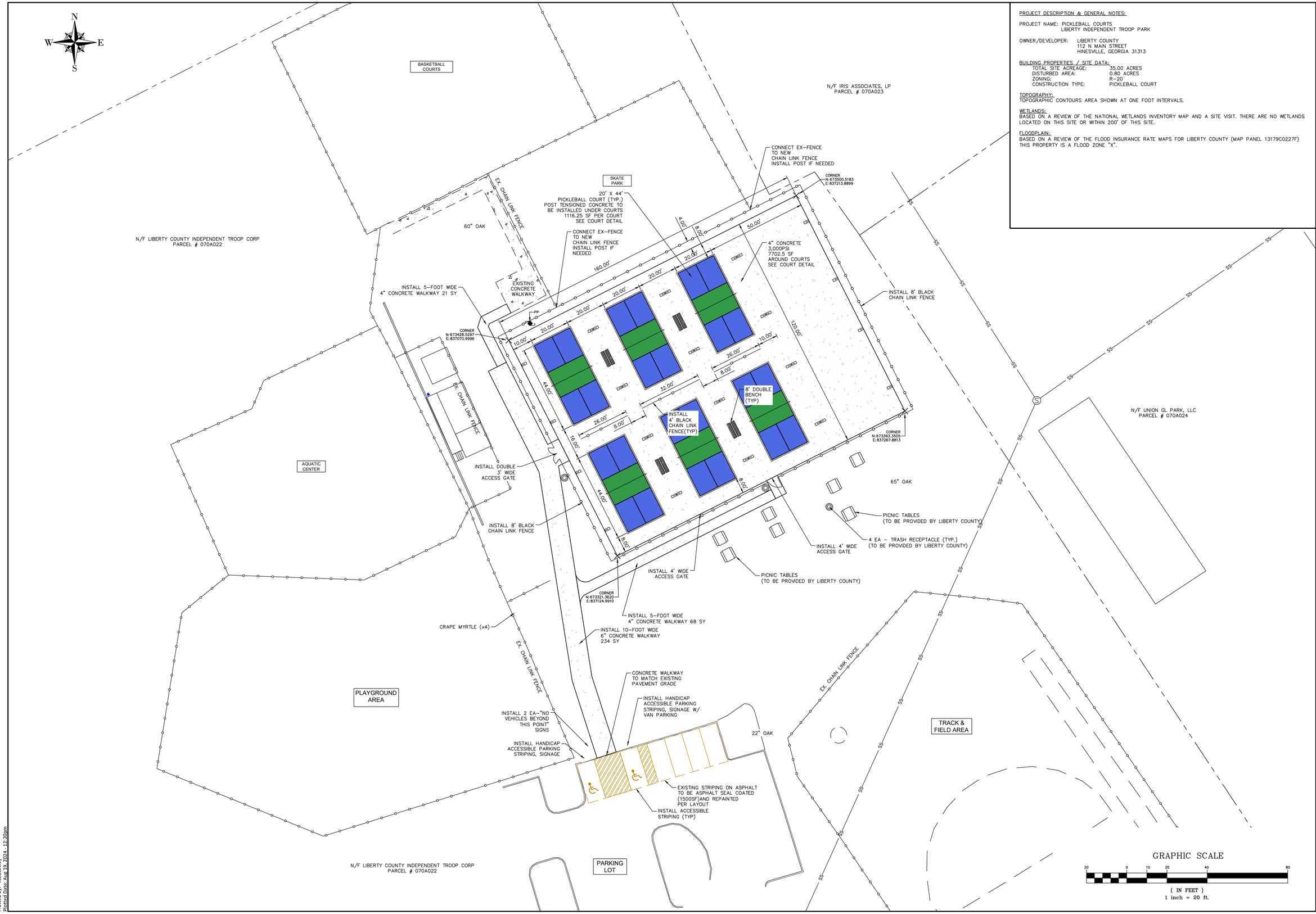
INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C2.1



PROJECT DESCRIPTION & GENERAL NOTES:

PROJECT NAME: PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

OWNER/DEVELOPER: LIBERTY COUNTY
112 N MAIN STREET
HINESVILLE, GEORGIA 31313

BUILDING PROPERTIES / SITE DATA:

TOTAL SITE ACREAGE:	35.00 ACRES
DISTURBED AREA:	0.80 ACRES
ZONING:	R-20
CONSTRUCTION TYPE:	PICKLEBALL COURT

TOPOGRAPHY:
TOPOGRAPHIC CONTOURS AREA SHOWN AT ONE FOOT INTERVALS.

WETLANDS:
BASED ON A REVIEW OF THE NATIONAL WETLANDS INVENTORY MAP AND A SITE VISIT. THERE ARE NO WETLANDS LOCATED ON THIS SITE OR WITHIN 200' OF THIS SITE.

FLOODPLAIN:
BASED ON A REVIEW OF THE FLOOD INSURANCE RATE MAPS FOR LIBERTY COUNTY (MAP PANEL 13179C0227F) THIS PROPERTY IS A FLOOD ZONE "X".

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
STAKING PLAN

REVISIONS:
1. 8/19/2024
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10

INITIAL DATE: 05/31/2024
DRAWN BY: FJGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C3.1

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Plotted By: Lee Jones
Plotted Date: Aug 19, 2024 - 12:20pm



GEORGIA811.COM DIAL 811

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THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CONTAINED WITHIN THIS SET OF DOCUMENTS AND SHALL REPORT ANY DISCREPANCIES TO T. R. LONG ENGINEERING, P.C. FOR IMMEDIATE RESOLUTION.

GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. 21744 TRENT R. LONG

GSWCC# 00000002134

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Hinesville, Georgia 31313
(912) 368-5664

POOLER:
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Suite 304
Pooler, Georgia 31322
(912) 335-1046

TRLONG ENGINEERING, P.C.
www.trlongeng.com

SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL #070A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
GRADING & DRAINAGE PLAN

REVISIONS:
1. 8/19/2024
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INITIAL DATE: 05/31/2024
DRAWN BY: FJGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C4.1

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Plotted By: Luis Gomez
Plotted Date: Aug 19, 2024 - 12:20pm

CONNECT TO EXISTING WATER LINE
INSTALL 1" WATER METER WITH BOX
1.5" WATER VALVE

INSTALL 10 LF 1.5" WATER LINE

CORE AND CONNECT TO EX-BACKWASH CONCRETE TANK AT BOTTOM OF TANK
INSTALL CLEAN OUT

INSTALL 66 LF 8" PVC SEWER MAIN @ 1.00% SLOPE

SMH-1
RIM 37.75
INV IN = 33.75
INV OUT = 33.65

INSTALL 218 LF 8" PVC SEWER MAIN @ 3.17% SLOPE

NOTE:
CONTRACTOR TO VERIFY SEWER MAIN SIZE, MATERIAL, LOCATION AND DEPTH PRIOR TO ORDERING MATERIALS FOR SEWER DOGHOUSE

DOGHOUSE SMH-2
RIM 30.75
INSIDE DROP
INV IN = 26.75
INV OUT = 20.75

CORNER
N: 673500.5183
E: 837213.8899

CORNER
N: 673393.3505
E: 837267.8813

CORNER
N: 673321.3620
E: 837124.9910

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\000-DRAWINGS\DWG\2024-40.dwg
Printed By: Forrest Gowdy
Plotted Date: Aug 19, 2024 - 12:20pm

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GSWCC# 00000002134

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(912) 335-1046

T.R. LONG ENGINEERING, P.C.
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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 07D00022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
UTILITY PLAN

REVISIONS:
1. 8/19/2024
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INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C5.1

"THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND-DISTURBING ACTIVITIES."

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 CALENDAR DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

MAINTENANCE: EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMENATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE LOCAL ISSUING AUTHORITY FOR REVIEW.

THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE SITE.

SOIL SERIES LISTING:
Ea – Eachaw-Urban Land Complex

BASKETBALL COURTS

SKATE PARK

N/F IRIS ASSOCIATES, LP
PARCEL # 070A023

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP
PARCEL # 070A022

60" OAK

EX. CHAIN LINK FENCE

LIMITS OF DISTURBANCE

EXISTING CONCRETE WALKWAY

INSTALL SINGLE ROW NON-SENSITIVE SILT FENCE (TYP.) Sd1-NS

Ea

Ds1
Ds2
Du

EXISTING ASPHALT PAVEMENT

CONCRETE PAD

EXISTING GRAVEL DRIVEWAY

AQUATIC CENTER

65" OAK

INSTALL TREE PROTECTION AROUND 65" OAK Tr

CRAPE MYRTLE (x4)

INSTALL CONCRETE WASHOUT AREA CSW

Co

PLAYGROUND AREA

22" OAK

INSTALL CONSTRUCTION ENTRANCE

TRACK & FIELD AREA

N/F UNION GL PARK, LLC
PARCEL # 070A024

PARKING LOT

N/F LIBERTY COUNTY INDEPENDENT TROOP CORP
PARCEL # 070A022

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. 21744 T. R. LONG

GSWCC# 0000002134

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TRLONG ENGINEERING, P.C.
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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A023 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
EROSION CONTROL PLAN (INITIAL)

REVISIONS:
1. 8/19/2024
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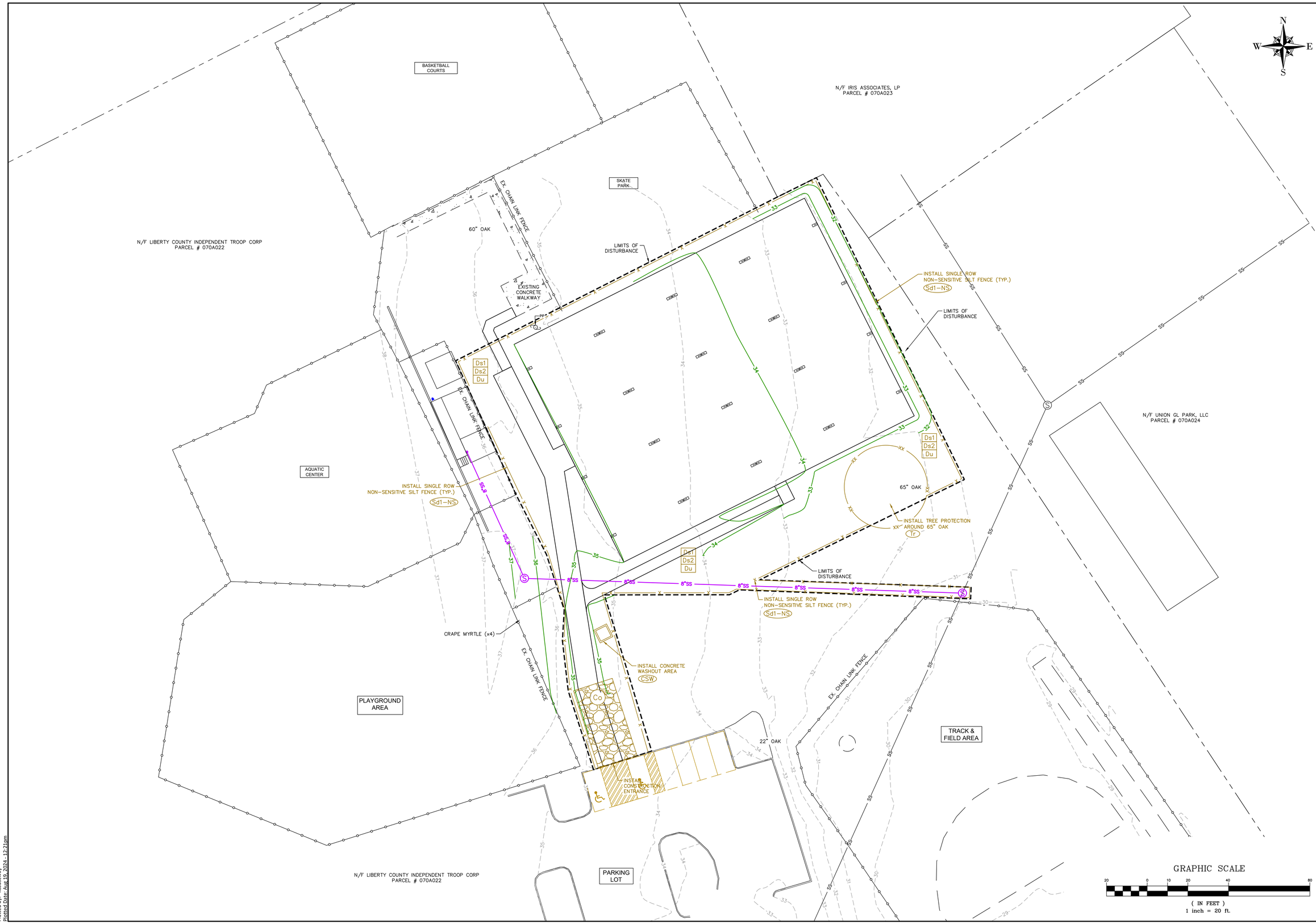
INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C7.1

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Plotted By: Matthew Hinkley
Plotted Date: Aug 19, 2024 - 12:21pm



Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Printed By: Kevin Hall
Plotted Date: Aug 19, 2024 - 12:21pm

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GSWCC# 00000002134

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POOLER:
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Suite 304
Pooler, Georgia 31322
(912) 335-1046

TRLONG ENGINEERING, P.C.
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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
EROSION CONTROL PLAN (INTERMEDIATE)

REVISIONS:
1. 8/19/2024
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INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C7.2



Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\500-DRAWINGS\DWG\2024-40.dwg
Plotted By: Tim Long
Plotted Date: Aug 19, 2024 - 12:21pm

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GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. 21744 TRENT R. LONG

GSWCC# 00000002134

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022 - CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
EROSION CONTROL PLAN (FINAL)

REVISIONS:
1. 8/19/2024
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6.
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INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C7.3

PROJECT INFORMATION

PROJECT TITLE: PICKLEBALL COURT
LIBERTY INDEPENDENT TROOP PARK

OWNER: LIBERTY COUNTY

24 HOUR CONTACT: TRENT R. LONG
(912)-610-1294
TRLONG@TRLONGENG.COM

ENGINEER: T.R. LONG ENGINEERING, P.C.
114 NORTH COMMERCE ST.
HINESVILLE, GEORGIA 31313
(912) 368-5664

GOVERNING AUTHORITY: CITY OF HINESVILLE
115 EAST M.L. KING JR. DRIVE
HINESVILLE, GEORGIA 31313
(912) 876-8454

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD: COASTAL GEORGIA
PROJECT NAME: PICKLEBALL COURT, LIBERTY INDEPENDENT TROOP PARK ADDRESS: 619 E OGLETHORPE HWY
CITY/COUNTY: HINESVILLE, GEORGIA DATE ON PLANS: 05/31/2024
NAME & EMAIL OF PERSON FILLING OUT CHECKLIST: TRENT LONG, trlong@trlongeng.com

EROSION, SEDIMENT, & POLLUTION CONTROL PLAN CHECKLIST

1. *REQUIREMENT: THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED.*

   RESPONSE: NOT REQUIRED FOR THIS PROJECT.

2. *REQUIREMENT: LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL.*

   RESPONSE: THE LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL IS FOUND ON THE UPPER RIGHT HAND SIDE OF ALL SHEETS.

3. *REQUIREMENT: LIMIT OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE GAEPD DISTRICT OFFICE. IF GAEPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE AT LEAST 4 OF THE BMPS LISTED IN APPENDIX 1 OF THIS CHECKLIST AND THE GAEPD APPROVAL LETTER.*

   RESPONSE: THE LIMIT OF DISTURBANCE FOR THIS PROJECT IS LESS THAN 50 ACRES.

4. *REQUIREMENT: THE NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT RESPONSIBLE FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS.*

   RESPONSE: THE NAME AND PHONE NUMBER OF THE 24-HOUR LOCAL CONTACT IS SHOWN IN THE ABOVE "PROJECT INFORMATION" SECTION.

5. *REQUIREMENT: PROVIDE THE NAME, ADDRESS, EMAIL ADDRESS AND PHONE NUMBER OF THE PRIMARY PERMITTEE.*

   RESPONSE: THE NAME, ADDRESS AND PHONE NUMBER OF THE PRIMARY PERMITTEE IS SHOWN ABOVE ON THE "PROJECT INFORMATION" SECTION.

6. *REQUIREMENT: NOTE TOTAL AND DISTURBED ACREAGE OF THE PROJECT OR PHASE UNDER CONSTRUCTION.*

   RESPONSE: THE TOTAL ACREAGE OF THE SITE IS 35.00 AND THE DISTURBED ACREAGE IS 0.80

7. *REQUIREMENT: PROVIDE THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE. GIVE THE LATITUDE AND LONGITUDE IN DECIMAL DEGREES.*

   RESPONSE: THE GPS LOCATIONS OF THE CONSTRUCTION EXIT IS N31.849686°, W81.583858°.

8. *REQUIREMENT: INITIAL DATE OF THE PLAN AND THE DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.*

   RESPONSE: THE INITIAL DATE AND ANY REVISIONS ARE ON THE BOTTOM RIGHT SIDE OF ALL SHEETS

9. *REQUIREMENT: DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY.*

   RESPONSE: THE PROJECT INCLUDES THE CONSTRUCTION OF A NEW PICKLEBALL COURT AND SIDEWALK.

10. *REQUIREMENT: PROVIDE VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS. INCLUDE DESIGNATION OF SPECIFIC PHASE, IF NECESSARY.*

    RESPONSE: A VICINITY MAP IS SHOWN ON THE TITLE SHEET OF THESE PLANS.

11. *REQUIREMENT: IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL SENSITIVE ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WHICH MAY BE AFFECTED.*

    RESPONSE: THE ARE NO RECEIVING WATERS FOR THIS SITE.

12. *REQUIREMENT: DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ES&PC PLAN AS STATED ON PART IV PAGE 19 OF THE PERMIT.*

    RESPONSE: PLEASE SEE THE DESIGN PROFESSIONAL'S CERTIFICATION SECTION ON THIS SHEET.

13. *REQUIREMENT: DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES&PC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMPS AND SAMPLING TO MEET PERMIT REQUIREMENTS AS STATED ON PART IV PAGE 19 OF THE PERMIT.*

    RESPONSE: PLEASE SEE THE DESIGN PROFESSIONAL'S 7 DAY VISIT CERTIFICATION ON SECTION ON THIS SHEET.

14. *REQUIREMENT: CLEARLY NOTE THE STATEMENT THAT "THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN 7 DAYS AFTER INSTALLATION." IN ACCORDANCE WITH PART IV.A.5 PAGE 25 OF THE PERMIT.*

    RESPONSE: PLEASE SEE THE DESIGN PROFESSIONAL'S 7 DAY VISIT CERTIFICATION ON SECTION ON THIS SHEET.

15. *REQUIREMENT: CLEARLY NOTE THE STATEMENT THAT "NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WATER VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS."*

    RESPONSE: **NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITH 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.**

16. *REQUIREMENT: PROVIDE A DESCRIPTION OF ANY BUFFER ENCROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED.*

    RESPONSE: **THIS PROJECT SHOULD NOT ENCROACH ON ANY BUFFERS.**

17. *REQUIREMENT: CLEARLY NOTE THE STATEMENT THAT "AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL."*

    RESPONSE: **AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.**

18. *REQUIREMENT: CLEARLY NOTE THE STATEMENT THE "WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT."*

    RESPONSE: **WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.**

19. *REQUIREMENT: CLEARLY NOTE THE STATEMENT THAT "THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES."*

    RESPONSE: **THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.**

20. *REQUIREMENT: CLEARLY NOTE STATEMENT THAT "EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE."*

    RESPONSE: **EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.**

21. *REQUIREMENT: CLEARLY NOTE THE STATEMENT "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."*

    RESPONSE: **ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING. SEE MULCHING AND VEGETATIVE PLAN REQUIREMENTS ON DETAIL SHEETS.**

22. *REQUIREMENT: ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III. C. OF THE PERMIT. INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMPS THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT.*

    RESPONSE: NO CONSTRUCTION ACTIVITY WILL DISCHARGE STORM WATER INTO AN IMPAIRED STREAM OR 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATER SHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT. THE SITE IS NOT LOCATED WITHIN ONE MILE OF AN IMPAIRED STREAM.

23. *REQUIREMENT: IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED IN ITEM 22 ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF NOI, THE ES&PC PLAN MUST ADDRESS ANY SITE*

    RESPONSE: NO TMDL IMPLEMENTATION PLAN IS NEEDED FOR THIS SITE.

24. *REQUIREMENT: BMPS FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.*

    RESPONSE: A CONCRETE WASHOUT AREA HAS BEEN ILLUSTRATED ON EACH EROSION CONTROL SHEET. NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON-SITE.

25. *REQUIREMENT: PROVIDE BMPS FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS.*

    RESPONSE:

    - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.LOCAL, STATE AND MANUFACTURERR'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
    - MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
    - SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
    - ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
    - FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
    - FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
    - FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
    - FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.
    - THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ON-SITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

26. *REQUIREMENT: DESCRIPTION OF THE MEASURES THAT WILL BE INSTALL DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.*

    RESPONSE:

    DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

    a. USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.
    b. FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, AT LEAST 70% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION OR EQUIVALENT PERMANENT STABILIZATION MEASURES.
    c. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES; A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE REGION, SUCH THAT WITHIN THE GROWING SEASON A 70% COVERAGE BY PERENNIAL VEGETATION SHALL BE ACHIEVED
    d. USE CONVENTIONAL PLANTING METHODS WHEN POSSIBLE.
    e. WHEN MIXED PLANTINGS ARE DONE DURING MARGINAL PLANTING PERIODS, COMPANION CROPS SHALL BE USED.
    f. IRRIGATION SHOULD BE USED WHEN THE SOIL IS DRY OR WHEN SUMMER PLANTINGS ARE DONE.
    g. LOW MAINTENANCE PLANTS, AS WELL AS NATIVES, SHOULD BE USED TO ENSURE LONG-LASTING EROSION CONTROL.
    h. MOWING SHOULD NOT BE PERFORMED DURING QUAIL NESTING SEASON (MAY TO SEPTEMBER).
    i. WILDLIFE PLANTINGS SHOULD BE INCLUDED IN CRITICAL AREA PLANTINGS.
    j. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.
    k. AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS ALLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED.
    l. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE. LIME SPREAD BY CONVENTIONAL EQUIPMENT SHALL BE "GROUND LIMESTONE" AND LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT SHALL BE "FINELY GROUND LIMESTONE."
    m. WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, THE INITIAL FERTILIZER SHALL BE MIXED WITH SEED, INNOCULANT (IF NEEDED), AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY. THE INNOCULANT, IF NEEDED, SHALL BE MIXED WITH THE SEED PRIOR TO BEING PLACED INTO THE HYDRAULIC SEEDER. THE SLURRY MIXTURE WILL BE AGITATED DURING APPLICATION TO KEEP THE INGREDIENTS THOROUGHLY MIXED. THE MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER BEING PLACED IN THE HYDROSEEDER.
    n. WHEN CONVENTIONAL PLANTING IS TO BE DONE, LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS: 1. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION. 2. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS. 3. BROADCAST AFTER STEEP SURFACES ARE SCARIFIED, PITTED OR TRENCHED. 4. A FERTILIZER PELLET SHALL BE PLACED AT ROOT DEPTH IN THE CLOSING HOLE BESIDE EACH PINE TREE SEEDLING.
    o. MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.
    p. MOW SERICEA LESPEDEZA ONLY AFTER FROST TO ENSURE THAT THE SEEDS ARE MATURE. MOW BETWEEN NOVEMBER AND MARCH. BERMUDAGRASS, BAHIAGRASS AND TALL FESCUE MAY BE MOWED AS DESIRED. MAINTAIN AT LEAST 6 INCHES OF TOP GROWTH UNDER ANY USE AND MANAGEMENT. MODERATE USE OF TOP GROWTH IS BENEFICIAL AFTER ESTABLISHMENT. EXCLUDE TRAFFIC UNTIL THE PLANTS ARE WELL ESTABLISHED. BECAUSE OF THE QUAIL NESTING SEASON, MOWING SHOULD NOT TAKE PLACE BETWEEN MAY AND SEPTEMBER.
    q. APPLY ONE TON OF AGRICULTURAL LIME EVERY 4 TO 6 YEARS OR AS INDICATED BY SOIL TESTS. SOIL TESTS CAN BE CONDUCTED TO DETERMINE MORE ACCURATE REQUIREMENTS IF DESIRED.

    VEGETATED WATERWAY OR STORMWATER CONVEYANCE

    a. A NATURAL OR CONSTRUCTED CHANNEL THAT IS SHAPED OR GRADED TO REQUIRED DIMENSIONS AND ESTABLISHED IN SUITABLE VEGETATION FOR THE STABLE CONVEYANCE OF RUNOFF WITHOUT CAUSING DAMAGE EITHER BY EROSION OR BY FLOODING.
    b. THIS STANDARD APPLIES TO ALL SITES WHERE ADDED CHANNEL CAPACITY AND/OR STABILIZATION IS REQUIRED TO CONTROL EROSION RESULTING FROM CONCENTRATED RUNOFF AND WHERE SUCH CONTROL CAN BE ACHIEVED BY THIS PRACTICE ALONE OR IN COMBINATION WITH OTHERS
    c. THE MINIMUM CAPACITY SHALL BE THAT REQUIRED TO CONVEY THE PEAK RUNOFF EXPECTED FROM A 25-YEAR, 24-HOUR STORM OR THE STORM SPECIFIED IN THE GSWCC EROSION AND SEDIMENT CONTROL MANUAL.
    d. CONSTRUCTION SPECIFICATIONS
        - d.1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE WATERWAY.
        - d.2. THE WATERWAY OR OUTLET SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN. IT WILL BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW. IF THE CHANNEL MUST HAVE EROSION PROTECTION OTHER THAN VEGETATION, THE LINING SHALL NOT COMPROMISE THE CAPACITY OF THE EMERGENCY SPILLWAY. I.E. THE CHANNEL SHALL BE OVER-EXCAVATED SO THAT THE LINING WILL BE FLUSH WITH THE SLOPE SURFACE.
        - d.3. FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED WATERWAY.
        - d.4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH WATERWAY FUNCTIONING.
        - d.5. STABILIZATION: APPLICABLE VEGETATIVE STANDARDS SHALL BE FOLLOWED FOR TIME OF SEEDING, SPRIGGING OR SODDING, LIMING AND FERTILIZING, AND SITE AND SEEDBED PREPARATION. EROSION CONTROL BLANKETS OR MATTING OR SOD SHALL BE USED TO AID IN THE ESTABLISHMENT OF VEGETATION. INSTALLATION METHODS SHOULD FOLLOW MANUFACTURER RECOMMENDATIONS.
    e. MULCHING SHALL BE A REQUIREMENT FOR ALL SEEDED OR SPRIGGED CHANNELS. TEMPORARY PROTECTION DURING ESTABLISHMENT SHOULD BE PROVIDED WHEN CONDITIONS PERMIT THROUGH TEMPORARY DIVERSIONS OR OTHER MEANS TO DISPOSE OF WATER.

27. *DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING PRODUCTS ON SITE.*

    RESPONSE: PLASTIC SHEETING OR TEMPORARY ROOFS TO BE UTILIZED TO COVER BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTE, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS IN ORDER TO MINIMIZE EXPOSURE TO PRECIPITATION AND TO STORMWATER.

28. *REQUIREMENT: DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES.*

    RESPONSE:

    PRODUCT SPECIFIC PRACTICES

    - PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS, AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
    - POINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
    - CONCRETE TRUCK WASHING - A CONCRETE WASHOUT AREA HAS BEEN DETAILED FOR THIS SITE.
    - FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR THE EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.
    - BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES
    - PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

    OTHER PRACTICES

    - THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF IT'S NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.
    - A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.
    - PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
    - THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY:
        a. THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM OF 6" THICK STONE, SHALL BE PLACED AS SHOWN ON THE PLAN. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.3 SEPARATION REQUIREMENTS.
        b. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE EROSION CONTROL PLAN.
        c. SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA AS SHOWN ON THE PLAN. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA. THE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
    - AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.
    - AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT PONDS AND DIVERSION DIKES AS SHOWN ON THE INITAL PHASE PLAN TO CONTROL EROSION AND STORM WATER RUN OFF.
    - NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.
    - ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE INITAL PHASE EROSION CONTROL PLAN.
    - MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE.
    - ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.
    - SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
    - THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
    - CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
    - EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL M

EROSION, SEDIMENT, & POLLUTION CONTROL PLAN CHECKLIST (CONTINUED)

30. *REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE PRIMARY PERMITTEE.**

RESPONSE: RECORD KEEPING IS NOT REQUIRED FOR THIS PROJECT

31. *REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.**

RESPONSE: SAMPLING IS NOT REQUIRED FOR THIS PROJECT.

32. *REQUIREMENT: PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.**

RESPONSE: RETENTION OF RECORDS IS NOT REQUIRED FOR THIS PROJECT.

33. *REQUIREMENT: DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.**

RESPONSE: THE COLLECTION AND ANALYZE'S OF SAMPLES IS NOT REQUIRED FOR THIS PROJECT.

34. *REQUIREMENT: APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE.**

RESPONSE: NTU VALUES NOT REQUIRED FOR THIS PROJECT.

35. *REQUIREMENT: DELINEATE ALL SAMPLING LOCATIONS IF APPLICABLE, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.**

RESPONSE: SAMPLING LOCATIONS NOT REQUIRED FOR THIS PROJECT.

36. *REQUIREMENT:A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING: (1) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS, (2) INTERMEDIATE GRADING AND DRAINAGE BMPS, AND (3) FINAL BMPS. FOR CONSTRUCTION SITES WHERE THERE WILL BE NO MASS GRADING AND THE INITIAL PERIMETER CONTROL BMPS, INTERMEDIATE GRADING AND DRAINAGE BMPS, AND FINAL BMPS ARE THE SAME, THE PLAN MAY COMBINE ALL OF THE BMPS INTO A SINGLE PHASE.**

RESPONSE: SEE ITEM 28 FOR A DESCRIPTION OF ALL INITIAL AND INTERMEDIATE BMPS AND ITEM 26 FOR A DESCRIPTION OF ALL FINAL BMPS. PLEASE SEE THE EROSION CONTROL PLAN TO SEE WHERE THESE BMPS ARE TO IMPLEMENTED.

37. *REQUIREMENT: GRAPHIC SCALE AND NORTH ARROW.*

RESPONSE: THE CORRECT GRAPHIC SCALE AND NORTH ARROW ARE SHOWN ON ALL SHEETS WHERE APPLICABLE.

38. REQUIREMENT: EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING:

Map Scale	Ground Slope	Contour Intervals, ft
1 inch = 100ft or larger scale	Flat 0 - 2%	0.5 or 1
	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

RESPONSE: CONTOURS ARE SHOWN IN 1' INTERVALS.

39. *REQUIREMENT: USE OF ALTERNATIVE BMPS WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMPSAS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY GAEPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT WWW.GASWCC.ORG.*

RESPONSE: NO ALTERNATIVE BMPS WILL BE USED.

40. *REQUIREMENT: USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION.**

RESPONSE: NO ALTERNATIVE BMPS WILL BE USED.

41. *REQUIREMENT: DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT.*

RESPONSE: THERE ARE NO 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS REQUIRED FOR THE SITE. THERE ARE NO STATE WATERS ADJACENT TO THE SITE AND NO ADDITIONAL BUFFERS ARE REQUIRED BY THE LOCAL ISSUING AUTHORITY.

42. *REQUIREMENT: DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE.*

RESPONSE: THERE ARE NO ON-SITE WETLANDS AND STATE WATERS LOCATED ON AND WITHIN 200' OF THE SITE.

43. *REQUIREMENT: DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.*

RESPONSE: ALL DRAINAGE BASIN INFORMATION IS SHOWN IN THE HYDROLOGY STUDY PROVIDED WITH THESE PLANS

44. *REQUIREMENT: PROVIDE HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH THE PRE- AND POST-DEVELOPED CONDITIONS.**

RESPONSE: A HYDROLOGY REPORT INCLUDING A DRAINAGE NARRATIVE, DRAINAGE CALCULATIONS AND DELINEATION OF PRE AND POST DEVELOPED CONDITIONS IS PROVIDED WITH THESE PLANS.

45. *REQUIREMENT: AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED.*

RESPONSE: THE PRE-DEVELOPMENT RUNOFF COEFFICIENT IS 73. THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 70.

46. *REQUIREMENT: STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION.IDENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.*

RESPONSE: THE STORM-DRAIN PIPE AND WEIR VELOCITIES ARE SHOWN ON THE EROSION CONTROL PLAN AS WELL AS APPROPRIATE OUTLET PROTECTION FOR EACH.

47. *REQUIREMENT: SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION*

RESPONSE: THE SOIL SERIES IS SHOWN ON THE INITIAL EROSION CONTROL PLAN.

48. *REQUIREMENT: THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION.*

RESPONSE: THE LIMITS OF DISTURBANCE ARE SHOWN ON EACH EROSIONS CONTROL SHEET.

49. *REQUIREMENT: PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN JUSTIFICATION EXPLAINING THE DECISION TO USE EQUIVALENT CONTROLS WHEN A SEDIMENT BASIN IS NOT ATTAINABLE MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATIN IN WHICH A SEDIMENT BASIN IS NOT PROVIDED. A WRITTEN JUSTIFICATION AS TO WHY 67 CUBIC YARDS OF STORAGE IS NOT ATTAINABLE MUST ALSO BE GIVEN. WORKSHEETS FROM THE MANUAL INCLUDED FOR STRUCTURAL BMPs AND ALL CALCULATIONS USED BY THE STORAGE DESIGN PROFESSIONAL TO OBTAIN THE REQUIRED SEDIMENT WHEN USING EQUIVALENT CONTROLS. WHEN DISCHARGING FROM SEDIMENT BASINS AND IMPOUNDMENTS, PERMITEES ARE REQUIRED TO UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE, UNLESS INFEASIBLE. IF OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE ARE NOT FEASABLE, A WRITTEN JUSTIFICATION EXPLAINING THIS DECISION MUST BE INCLUDED IN THE PLAN.*

RESPONSE: THERE IS NO SEDIMENT STORAGE REQUIRED FOR THIS PROJECT.

50. *REQUIREMENT: LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND.*

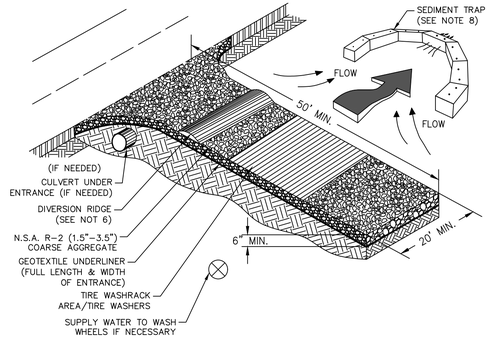
RESPONSE: THE BMPS SHOWN AND DESCRIBED IN THIS PANS ARE CONSISTENT AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA CALLS FOR.

51. *REQUIREMENT: PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.*

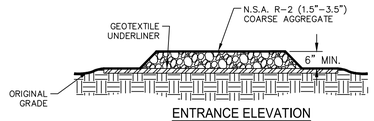
RESPONSE: DETAILED DRAWINGS ARE PROVED ON THE SHEETS LABELED "DETAILS" IN THIS PLAN.

52. *REQUIREMENT: PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.*

RESPONSE: PLEASE SEE THE DETAILS SHEET FOR THE VEGETATIVE PLAN.

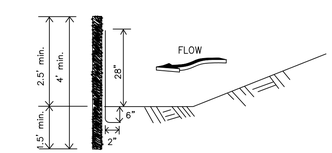


NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.



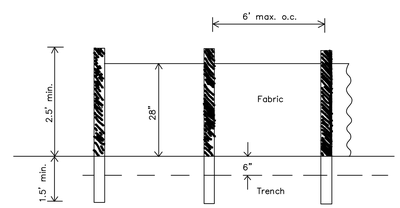
ENTRANCE ELEVATION

TEMPORARY CONSTRUCTION EXIT (Co)
NOT TO SCALE



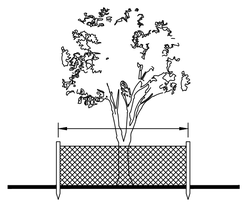
NOTE: Use 36" D.O.T. approved fabric.
Use wood or steel posts

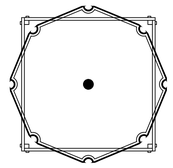
SIDE VIEW



FRONT VIEW

SILT FENCE - TYPE NS (Sd1-NS)
Non-Sensitive - Type A
NOT TO SCALE





BARRIER CONSTRUCTED TO PROTECT TREE TRUNK, CROWN, AND ROOT SYSTEM FROM INJURY. BARRIERS SHALL BE LOCATED AT THE LIMITS OF THE TREE'S CRITICAL ROOT ZONE (A RADIUS OF ONE AND A HALF FEET PER INCH OF THE TREE'S DIAMETER AT BREAST HEIGHT). BARRIER SHALL BE KEPT IN GOOD CONDITION FOR THE DURATION OF THE PROJECT AND IS TO REMAIN IN PLACE UNTIL THE NOTICE OF TERMINATION.

FOR ADDED PROTECTION

-PROVIDE 4" DEEP ORGANIC MULCH OVER ANY UNPROTECTED ROOT ZONE.
-PROVIDE TEMPORARY IRRIGATION WHERE PRACTICAL AND FEASIBLE.

TREE PROTECTION
CHAIN LINK FENCE DETAIL (Tr)
NOT TO SCALE

GEORGIA811.COM DIAL 811

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 0700022; CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
EROSION CONTROL NOTES

REVISIONS:
1. 8/19/2024
2.
3.
4.
5.
6.
7.
8.
9.
10

INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C7.5

Drawing File: G:\ACTIVE PROJECTS\2024-40 PI - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Plotted By: Adrienne Wilson
Plotted Date: Aug 19, 2024 - 12:21pm

DS1
DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DEFINITION
APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE.

PURPOSE
1. TO REDUCE RUNOFF EROSION
2. TO CONSERVE MOISTURE
3. TO PREVENT SURFACE COMPACTION OR CRUSTING
4. TO CONTROL UNDESIRABLE VEGETATION
5. TO INCREASE BIOLOGICAL ACTIVITY IN THE SOIL.

REQUIREMENT FOR REGULATORY COMPLIANCE
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED.

SPECIFICATIONS
MULCHING WITHOUT SEEDING
THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.

SITE PREPARATION
1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS
SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:
1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.
2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.
3. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND REUSED.

APPLYING MULCH
WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20–30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.
3. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

ANCHORING MULCH
1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK."DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER–TYPE EQUIPMENT MAY BE ANCHORED. TACKIFIERS, BINDERS AND HYDRAULIC MULCH WITH TACKIFIERS SPECIFICALLY DESIGNED FOR TACKING STRAW CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION TACKIFIERS. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.
3. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

APPLICATION RATE FOR EACH TYPE OF SOIL ENCOUNTERED ON THE SITE.

MULCHING: MULCHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCHING APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED.
1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 LBS PER ACRE. DRY STRAW R DRY HAY SHALL BE APPLIED AFTER HYDRAULIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OF WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES GREATER THAN 3/4:1 OR STEEPER.
4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3" FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITIES MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCHING IS NOT REQUIRED.


MULCHING
NOT TO SCALE
Ds1

DS2
DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION:
THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

PURPOSE:
1. TO REDUCE RUNOFF AND SEDIMENT DAMAGE OF DOWN STREAM RESOURCES
2. TO PROTECT THE SOIL SURFACE FROM EROSION
3. TO IMPROVE WILDLIFE HABITAT
4. TO IMPROVE AESTHETICS
5. TO IMPROVE TILTH, INFILTRATION AND AERATION AS WELL AS ORGANIC MATTER FOR PERMANENT PLANTINGS

REQUIREMENT FOR REGULATORY COMPLIANCE:
MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTUR– BANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.

CONDITIONS
TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED.

SPECIFICATIONS
GRADING AND SHAPING
EXCESSIVE WATER RUN–OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND–SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION
WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

LIME AND FERTILIZER
AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10–10–10 FERTILIZER OR THE EQUIVALENT PER ACRE (12–16 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

SEEDING
SELECT A GRASS OR GRASS–LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE–QUARTER TO ONE–HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED"LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND.

MULCHING
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH.
MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION.
REFER TO DS1–DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

IRRIGATION
DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

GRASSING TEMPORARY
NOT TO SCALE
Ds2

SEEDING RATES FOR TEMPORARY SEEDING.

SPECIES	RATE PER 1,000 SQ.FT.	RATE PER ACRE.*	PLANTING DATES**
RYE	3.9 LBS.	3 BU	9/1 – 3/1
RYE GRASS	0.9 LBS.	40 LBS.	8/15 – 4/1
ANNUAL LESPEDEZA	0.9 LBS.	40 LBS.	1/15 –9/15
WEEPING LOVEGRASS	0.1 LBS.	4 LBS.	2/15 – 6/15
SUNDANGRASS	1.4 LBS.	60 LBS.	3/1 – 8/1
BROWN MILLET	0.9 LBS.	40 LBS.	4/1 – 7/15
WHEAT	4.1 LBS.	3 BU	9/15 – 2/1

* UNUSUAL SITE CONDTIONS MAY REQUIRE HEAVIER SEEDING RATES.
** SEEDING DATES MAY NEED TO BE ALTERED TO FIT TMPERATURE VARIATIONS AND CONDITIONS.

DU
DUST CONTROL ON DISTURBED AREAS

DEFINITION
CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADS, AND DEMOLITION SITES.

CONDITIONS
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF–SITE DAMAGE MAY OCCUR WITHOUT TREATMENT.

METHOD AND MATERIALS

TEMPORARY METHODS
- MULCHES. SEE STANDARD DS1–DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB–TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- VEGETATIVE COVER. SEE STANDARD DS2– DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
- SPRAY–ON ADHESIVES. THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS) KEEP TRAFFIC OFF THESE AREAS. REFER TO STANDARD TB–TACKIFIERS AND BINDERS.
- TILLAGE. THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL–TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING–TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION. THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.
- BARRIERS. SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.
- CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS
- PERMANENT VEGETATION. SEE STANDARD DS3–DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION). EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING. THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE STANDARD TP–TOPSOILING.
- STONE. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR–CONSTRUCTION ROAD STABILIZATION.

DUST CONTROL
NOT TO SCALE
Du

DS3
DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION
THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

CONDITIONS
PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.

SPECIFICATIONS
GRADING AND SHAPING
GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.
WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION.
CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET.
DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

SEEDBED PREPARATION
SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

BROADCAST PLANTINGS
1. TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
3. TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
4. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

INDIVIDUAL PLANTS
1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.
2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.
3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

PLANTING
HYDRAULIC SEEDING
MIX THE SEED (INOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

CONVENTIONAL SEEDING
SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A CULTIPACKER SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO ¼ INCH OF SOIL FOR SMALL SEED AND ½ TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.

NO–TILL SEEDING
NO–TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. NO–TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO–TILL SEEDING EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

INDIVIDUAL PLANTS
SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHALL BE PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING THE ROOTS. NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TIPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE. WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.

MULCHING
MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:
1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 ½ TONS PER ACRE.
2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES ½:1 OR STEEPER.
4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3" FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
7. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH
STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING THE MULCH MAY BE SPREAD BY BLOWER–TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.
WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

ANCHORING MULCH
ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:
1. EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.

THE COMBINATION F ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF GRADE SS–1H OR CSS–1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS, AND ALL OTHER STRUCTURES FROM ASPHALT DISCOLORATION.

2. HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK"OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL.
3. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB–TACKIFIERS AND BINDERS.
4. RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE–QUARTER TO ONE HALF BUSHEL PER ACRE.
5. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

IRRIGATION
IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

GRASSING PERMANENT
NOT TO SCALE
Ds3

TABLE 6–5.1 FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS FOR EQUIVALENT N–P–K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6–12–12 6–12–12 10–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50–100 LBS./AC. 1/2/ – 30
2. COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6–12–12 0–10–10 0–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	0–50 LBS./AC. 1/ – –
3. GROUND COVERS	FIRST SECOND MAINTENANCE	10–10–10 10–10–10 10–10–10	1300 LBS./AC. 1300 LBS./AC. 1100 LBS./AC.	– – –
4. PINE SEEDLINGS	FIRST	20–10–6	ONE 21–GRAM PELLET PER SEEDING PLACED IN THE CLOSING HOLE	–
5. SHRUB LESPEDEZA	FIRST MAINTENANCE	0–10–10 0–10–10	700 LBS./AC. 700 LBS./AC.4/	– –
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10/10/2010	500 LBS./AC.	30 LB./ACRE/ 5/
7. WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6–12–12 6–12–12 10–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50–100 LBS./AC. 2/6/ 50–100 LBS./AC. 2/ 30 LBS./AC.
8. WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6–12–12 0–10–10 0–10–10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50 LBS./AC./6/

Month	Temporary Cover Ds2	Rate per Acre Seeded Alone	Rate per Acre Added To Mix	Permanent Cover Ds3	Rate per Acre Seeded Alone	Rate per Acre Added To Mix
January	Rye grass Rye	40 lbs. 3 bu.	–– .5 bu.	Unhulled Bermuda Sericea Lespedeza (1)	10 lbs. 75 lbs.	6 lbs. ––
February	Annual Lespedeza Rye grass Rye	40 lbs. 40 lbs. 3 bu.	10 lbs. –– .5 bu.	Unhulled Bermuda Sericea Lespedeza (1)	10 lbs. 75 lbs.	6 lbs. ––
March	Weeping Lovegrass Annual Lespedeza	4 lbs. 40 lbs.	2 lbs. 10 lbs.	Pensacola Bahia Hulled Bermuda Sericea Lespedeza (2)	60 lbs. 10 lbs. 60 lbs.	30 lbs. 6 lbs. ––
April	Weeping Lovegrass Sudan Grass	4 lbs. 60 lbs. 40 lbs.	2 lbs. –– 10 lbs.	Pensacola Bahia Weeping Lovegrass Hulled Bermuda Sericea Lespedeza (2)	60 lbs. 6 lbs. 10 lbs. 60 lbs.	30 lbs. 6 lbs. 6 lbs. ––
May	Weeping Lovegrass Sudan Grass	4 lbs. 60 lbs. 40 lbs.	2 lbs. –– 10 lbs.	Pensacola Bahia Weeping Lovegrass Hulled Bermuda Sericea Lespedeza (2)	60 lbs. 6 lbs. 10 lbs. 60 lbs.	30 lbs. 6 lbs. 6 lbs. ––
June	Pearl Millet Sudan Grass	50 lbs. 60 lbs. 40 lbs.	–– –– 10 lbs.	Pensacola Bahia Hulled Bermuda	60 lbs. 10 lbs.	30 lbs. 6 lbs.
July	Pearl Millet Sudan Grass	50 lbs. 60 lbs. 40 lbs.	–– –– 10 lbs.	Pensacola Bahia	60 lbs.	30 lbs.
August	Pearl Millet Rye	50 lbs. 3 bu.	–– .5 bu.	Pensacola Bahia	60 lbs.	30 lbs.
September	Rye grass Oats Wheat	40 lbs. 4 bu. 3 bu.	–– 1 bu. .5 bu.	Sericea Lespedeza (1)	75 lbs.	––
October	Rye grass Oats Wheat Rye Barley	40 lbs. 4 bu. 3 bu. 3 bu. 3 bu.	–– 1 bu. .5 bu. .5 bu. .5 bu.	Sericea Lespedeza (1)	75 lbs.	––
November	Rye grass Oats Wheat Rye Barley	40 lbs. 4 bu. 3 bu. 3 bu. 3 bu.	–– 1 bu. .5 bu. .5

CONCRETE WASHOUT AREA

PURPOSE – PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA TO PREVENT POLLUTANTS FROM ENTERING SURFACE WATERS OR GROUNDWATER.

CONDITIONS OF USE – CONCRETE WASHOUT AREA BEST MANAGEMENT PRACTICES ARE IMPLEMENTED ON CONSTRUCTION PROJECTS WHERE:

- CONCRETE IS USED AS A CONSTRUCTION MATERIAL
- IT IS NOT POSSIBLE TO DISPOSE OF ALL CONCRETE WASTEWATER AND WASHOUT OFFSITE (READY MIX PLANT, ETC.).
- CONCRETE TRUCKS, PUMPERS, OR OTHER CONCRETE COATED EQUIPMENT ARE WASHED ONSITE.

DESIGN AND INSTALLATION SPECIFICATIONS

IMPLEMENTATION – THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:
- PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY.
- DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
- CONCRETE WASHOUT AREAS MAY BE PREFABRICATED CONCRETE WASHOUT CONTAINERS, OR SELF-INSTALLED STRUCTURES (ABOVE-GRADE OR BELOW-GRADE).
- PREFABRICATED CONTAINERS ARE MOST RESISTANT TO DAMAGE AND PROTECT AGAINST SPILLS AND LEAKS. COMPANIES MAY OFFER DELIVERY SERVICE AND PROVIDE REGULAR MAINTENANCE AND DISPOSAL OF SOLID AND LIQUID WASTE.
- IF SELF-INSTALLED CONCRETE WASHOUT AREAS ARE USED, BELOW-GRADE STRUCTURES ARE PREFERRED OVER ABOVE-GRADE STRUCTURES BECAUSE THEY ARE LESS PRONE TO SPILLS AND LEAKS.
- SELF-INSTALLED ABOVE-GRADE STRUCTURES SHOULD ONLY BE USED IF EXCAVATION IS NOT PRACTICAL.

EDUCATION – THE FOLLOWING EDUCATION PRACTICES ARE RECOMMENDED:
- DISCUSS THE CONCRETE MANAGEMENT TECHNIQUES DESCRIBED IN THIS BEST MANAGEMENT PRACTICE WITH THE READY-MIX CONCRETE SUPPLIER BEFORE ANY DELIVERIES ARE MADE.
- EDUCATE EMPLOYEES AND SUBCONTRACTORS ON THE CONCRETE WASTE MANAGEMENT TECHNIQUES DESCRIBED IN THIS SECTION.
- ARRANGE FOR CONTRACTOR'S SUPERINTENDENT OR LEVEL 1A CERTIFIED PERSONNEL TO OVERSEE AND ENFORCE CONCRETE WASTE MANAGEMENT PROCEDURES.
- A SIGN SHOULD BE INSTALLED ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

CONTRACTS – INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO CONCRETE SUPPLIER AND SUBCONTRACTOR AGREEMENTS.

LOCATION AND PLACEMENT – THE FOLLOWING GUIDELINES SHALL BE USED WHEN LOCATING AND PLACING THE CONCRETE WASH-OUT AREA:
- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING WETLANDS.
- ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS, PREFERABLY NEAR THE AREA WHERE THE CONCRETE IS BEING POURED.
- IF TRUCKS NEED TO LEAVE A PAVED AREA TO ACCESS WASHOUT, PREVENT TRACK-OUT WITH A CONSTRUCTION EXIT.
- THE NUMBER OF FACILITIES YOU INSTALL SHOULD DEPEND ON THE EXPECTED DEMAND FOR STORAGE CAPACITY.
- ON LARGE SITES WITH EXTENSIVE CONCRETE WORK, WASHOUTS SHOULD BE PLACED IN MULTIPLE LOCATIONS FOR EASE OF USE BY CONCRETE TRUCK DRIVERS.

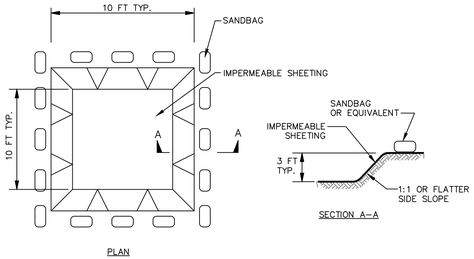
ONSITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES:
- TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT. FROM SENSITIVE AREAS INCLUDING STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
  - APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK CHUTE.
  - APPROXIMATELY 50 GALLONS ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK
- WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
- CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
- ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

TEMPORARY ABOVE-GRADE CONCRETE WASHOUT FACILITY
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

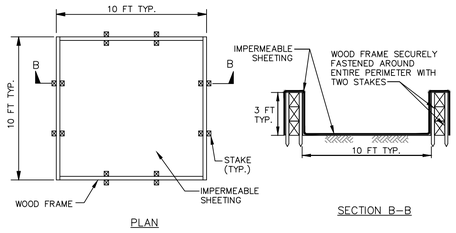
TEMPORARY BELOW-GRADE CONCRETE WASHOUT FACILITY
- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

INSPECTION AND MAINTENANCE
- INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
- DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY CONTINUED PERFORMANCE.
- CHECK OVERALL CONDITION AND PERFORMANCE.
- CHECK REMAINING CAPACITY (% FULL).
- IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SIDEWALLS ARE NOT DAMAGED.
- IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
- WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
- WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
- IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
- DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
- DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
- PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
- REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
- WHEN YOU REMOVE MATERIALS FROM THE SELF-INSTALLED CONCRETE WASHOUT, BUILD A NEW STRUCTURE; OR, IF THE PREVIOUS STRUCTURE IS STILL INTACT, INSPECT FOR SIGNS OF WEAKENING OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING.

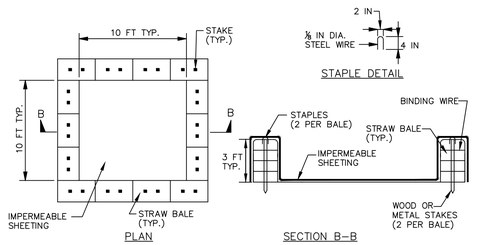
REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES
- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



EXCAVATED WASHOUT STRUCTURE



WASHOUT STRUCTURE WITH WOOD PLANKS



NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

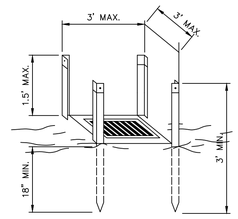
1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

NOTE: WASHOUT OF THE CONCRETE TRUCK DRUM AT THE CONSTRUCTION SITE IS PROHIBITED

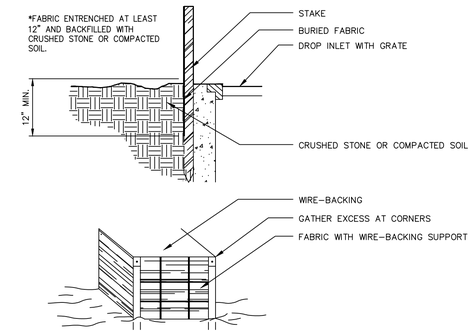
CONCRETE WASHDOWN AREA DETAIL

NOT TO SCALE

CSW



NOTES :
1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.



FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

NOT TO SCALE

Sd2-F

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
EROSION CONTROL DETAILS

REVISIONS:
1. 8/19/2024
2.
3.
4.
5.
6.
7.
8.
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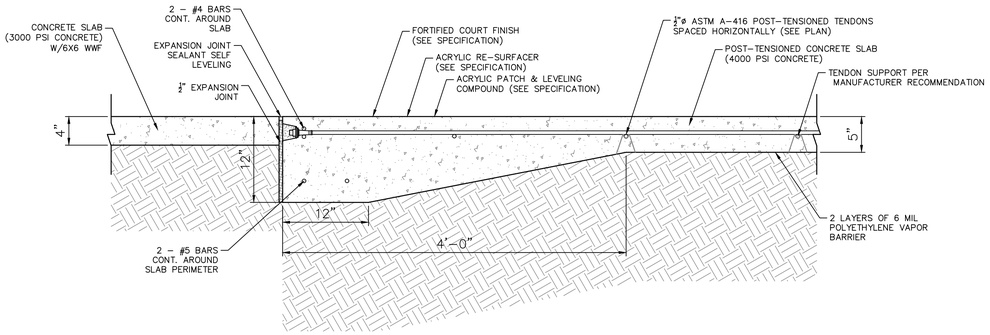
10

INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C7.7

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\500-DRAWINGS\DWG\2024-40.dwg
Plotted By: Forrest Gowins
Plotted Date: Aug 19, 2024 - 12:21pm



POST TENSION SLAB DETAIL
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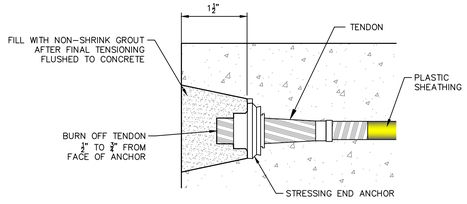

WEDGE ANCHOR SECTION
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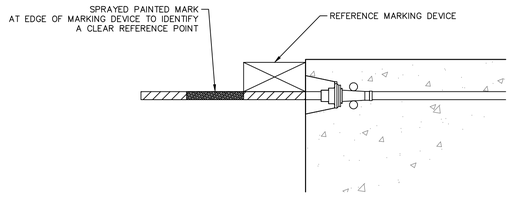

ELONGATION REFERENCE MARK
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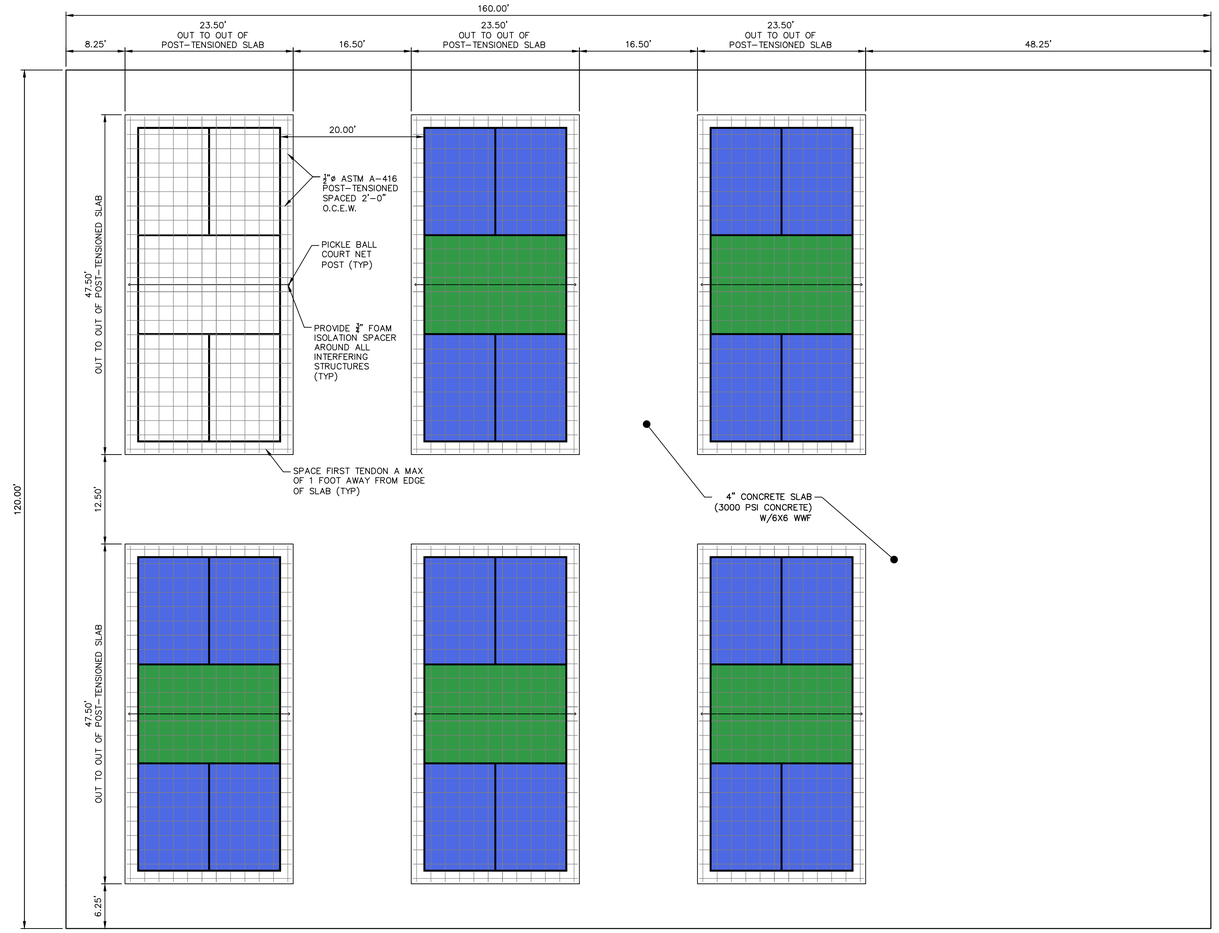
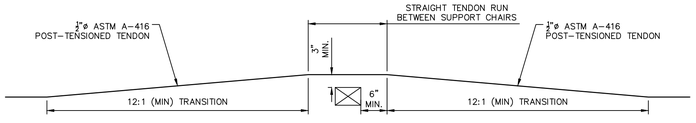


POST TENSION SLAB DETAIL OPTION A
SCALE: NTS



TENDON DEVIATION DETAIL
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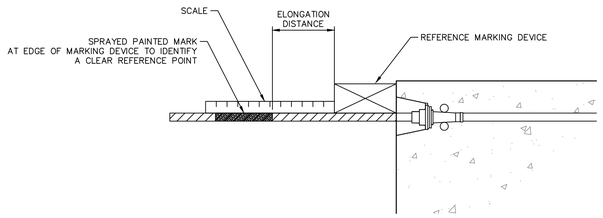
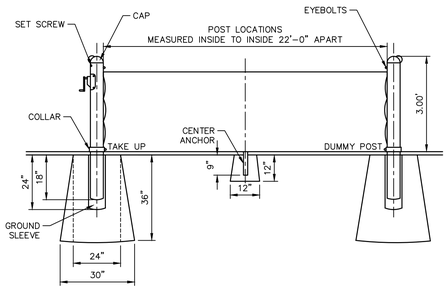
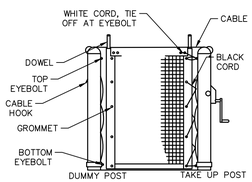


MEASURING TENSIONING OF CABLES
SCALE: NTS

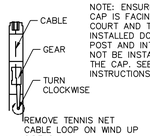


POST AND ANCHOR INSTALLATION
SCALE: NTS

PICKLE BALL COURT APPURTENANCES NOTES:
1. CONTRACTOR SHALL CONSULT MANUFACTURER FOR RECOMMENDED INSTALLATION OF NEW POSTS AND SHALL CONSULT WITH ENGINEER ON VARIATIONS FROM DETAIL.
2. VERTICAL AND HORIZONTAL LOCATIONS OF NET POSTS ON COURT SURFACES SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL FEDERATION OF PICKLE BALL (IFP) OFFICIAL TOURNAMENT RULE BOOK.
3. NET BODY SHALL BE COMPOSED OF BRAIDED, SOLID–CORE BLACK POLYETHYLENE WITH UV RESISTANT TREATMENT AND HEAT–SET KNOTS.
4. NET HEADBAND SHALL BE POLYESTER CANVAS LOCK STITCHED WITH WHITE POLYESTER THREAD.



NET INSTALLATION
SCALE: NTS



NOTE: ENSURE PULLET ON CAP IS FACING AWAY FROM THE COURT AND THE NET CABLE IS INSTALLED DOWN THE SIDE OF THE POST AND INTO GEAR. IT SHOULD NOT BE INSTALLED DOWN THROUGH THE CAP. SEE NET INSTALLATION INSTRUCTIONS FOR AN ILLUSTRATION.

POST END DETAIL
SCALE: NTS

POST–TENSIONED PLAN NOTES:
1. STRUCTURAL FILL SHALL BE COMPACTED TO 98% MAXIMUM STANDARD PROCTOR DENSITY.
2. POST–TENSIONING TENDONS SHALL BE ½"ø GRADE 270 KSI SINGLE–STRANDED UN–BONDED TENDONS WITH WEDGE TYPE ANCHORING SYSTEMS.
3. POST–TENSIONING TENDONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A–416 AND FINAL TENDON ASSEMBLY SHALL CONFORM TO THE POST–TENSIONING INSTITUTE'S (PTI) SPECIFICATION FOR UN–BONDED SINGLE STRAND TENDONS.
4. TENDONS SHALL BE STRAIGHT, UNIFORMLY SPACED, AND INSTALLED PER MANUFACTURER RECOMMENDATIONS.
5. TENDONS SHALL BE PROPERLY SUPPORTED OR CHAIRED IN THE MIDDLE OF THE SLAB AND SHOULD BE SECURED TO MAINTAIN THEIR HORIZONTAL AND VERTICAL POSITIONS DURING THE PLACEMENT OF THE CONCRETE.
6. SLAB CONCRETE SHALL BE TYPE 1 WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI. THE CONTRACTOR SHALL SUBMIT A CONCRETE MIX DESIGN, INCLUDING PROJECTED CURE RATE FROM 0 TO 28 DAYS, TO THE ENGINEER A LEAST ONE WEEK PRIOR TO PLACING THE SLAB.
7. THE CONCRETE MIX DESIGN SHALL BE SELECTED TO MINIMIZE EARLY CURING AND SHRINKAGE CRACKING THAT MAY FORM PRIOR TO TENDON SRESSING.
8. THE CONTRACTOR SHALL PROVIDE THE MEANS TO PREVENT CONCRETE FROM SPLATTERING ON THE POST.
9. POST–TENSIONED SLAB SHALL BE PLACED IN INDIVIDUAL, CONTINUOUS POURS (NO CONSTRUCTION JOINTS SHALL BE ALLOWED IN THE FIELD).
10. SLAB STRESSING SHALL OCCUR AT A CONCRETE STRENGTH OF 1,700 PSI OR GREATER. CONTRACTOR MAY CONSIDER TENSIONING UP TO 50% OF THE MAXIMUM ULTIMATE TENSILE STRENGTH 24 HOURS AFTER PLACEMENT OF CONCRETE.
11. TENDONS SHALL BE TEMPORARILY STRESSED TO 80% OF THEIR MINIMUM ULTIMATE TENSILE STRENGTH TO OVERCOME FRICTION AND TO ENABLE WEDGE SEATING. FINAL TENDON ELONGATION SHALL BE SHOWN IN THE DRAWINGS.
12. CLOSURE STRIPS AND MOM STRIPS SHALL NOT BE PLACED UNTIL SHORTENING IN THE POST–TENSIONED SLAB HAD OCCURRED.
13. ALL CONSTRUCTION–PHASE HARDWARE WHICH MAY CAUSE RESTRAINT TO SHORTENING IN THE SLAB, INCLUDING PINS HOLDING SCREED CUPS, SHALL BE REMOVED FROM THE SLAB BEFORE SET OCCURS.
14. CONTRACTOR SHALL PLACE ASTM C171 POLYETHYLENE SHEETING OVER SLAB FOR MOISTURE LOSS AND REFLECTIVE CONTROL DURING SLAB CURE.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 0703A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
COURT DETAILS

REVISIONS:
1. 8/19/2024
2.
3.
4.
5.
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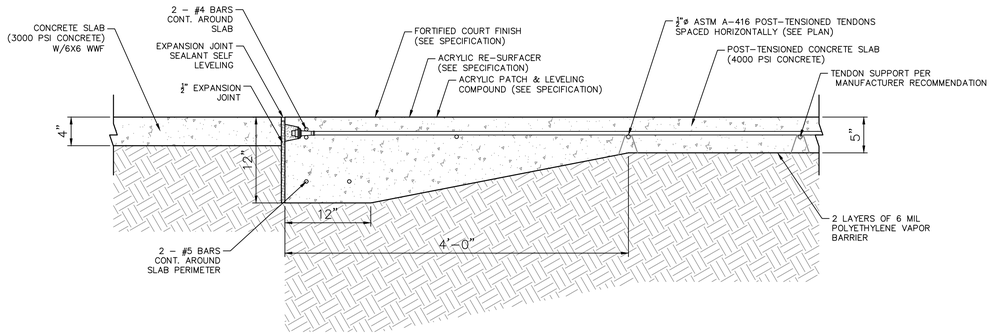
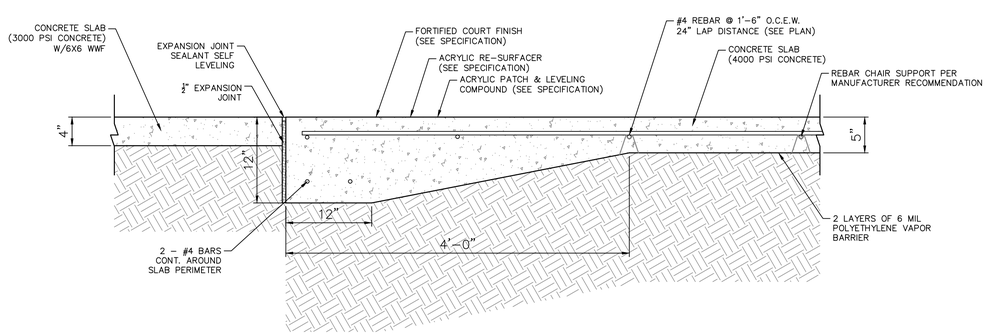
INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C8.1

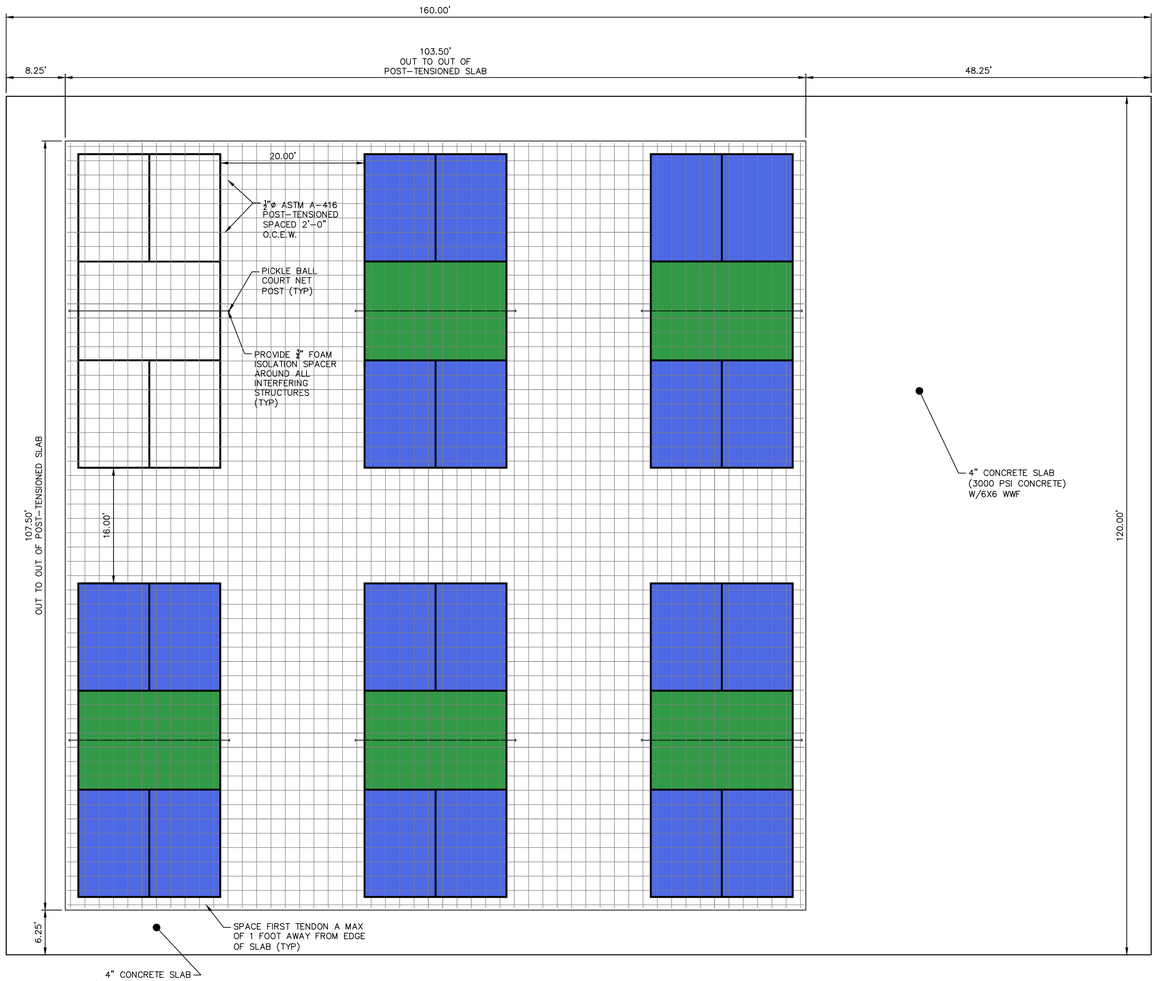
Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Plotted By: Fernando Gonzalez
Plotted Date: Aug 19, 2024 - 12:21pm



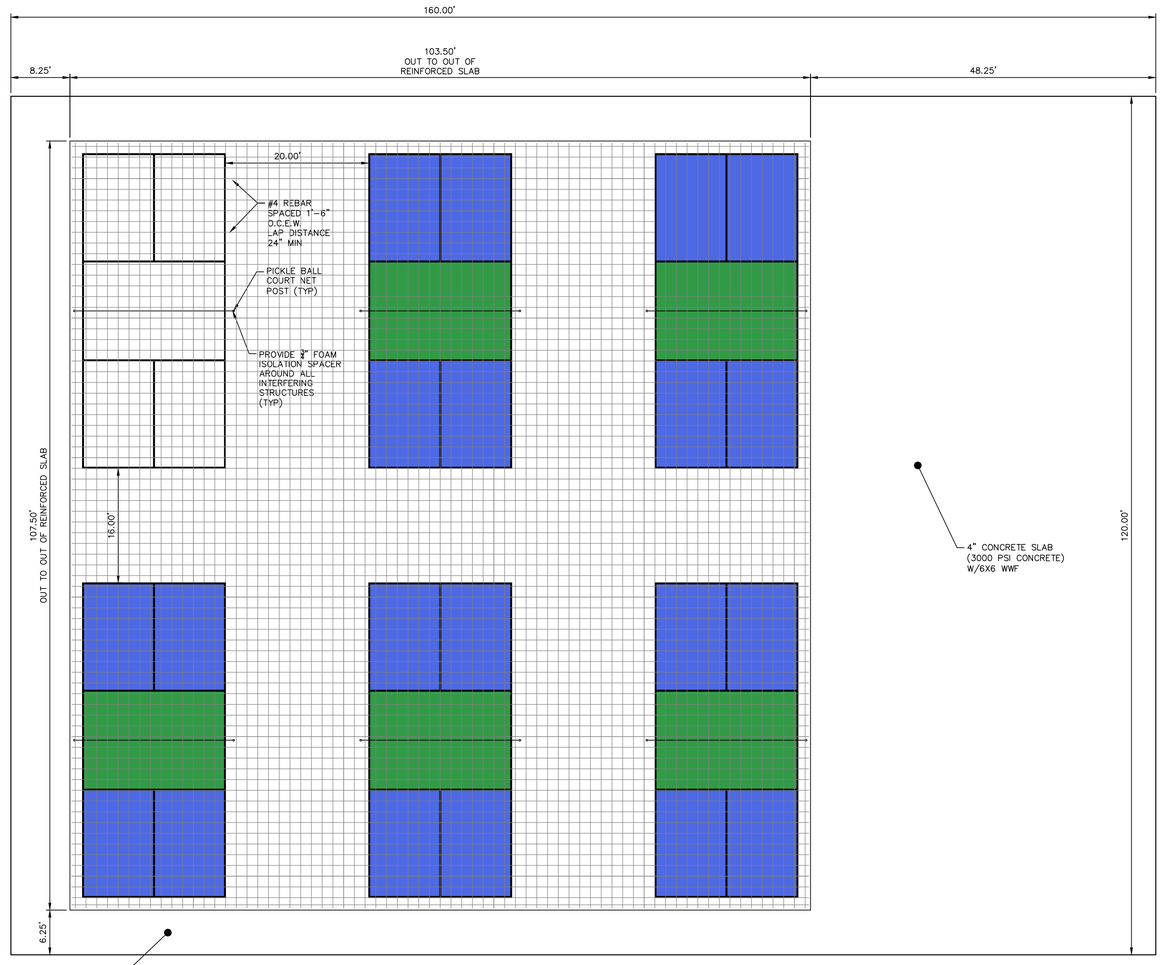
POST TENSION SLAB DETAIL
SCALE: NTS



REINFORCED SLAB DETAIL
SCALE: NTS



POST TENSION SLAB DETAIL
OPTION B
SCALE: NTS



REINFORCED SLAB DETAIL
OPTION C
SCALE: NTS

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GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. 21744 TRENT R. LONG

GSWCC# 00000021345

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 0703A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
COURT DETAILS

REVISIONS:
1. 8/19/2024
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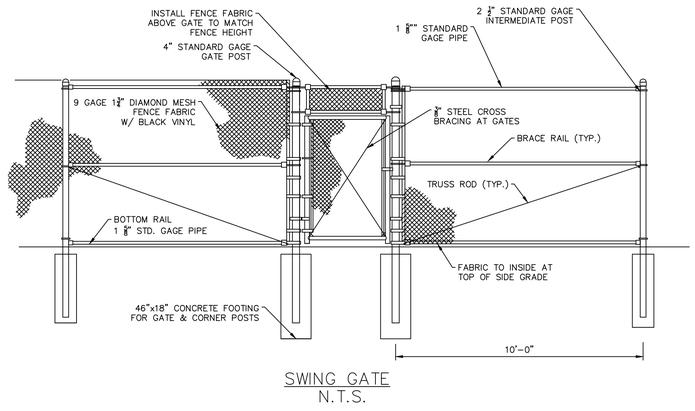
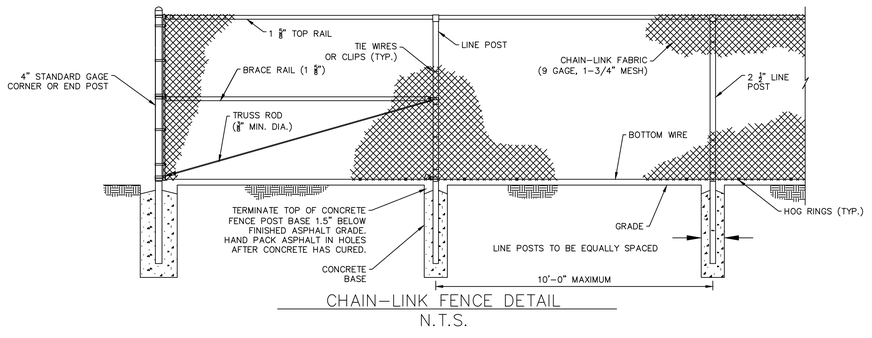
INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C8.2

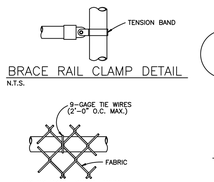
Drawing File: G:\ACTIVE PROJECTS\2024-40 IH - Liberty Independent Troop Park Pickle Ball\90D-DRAWINGS\DWG\2024-40.dwg
Plotted By: Fred Gilbert
Plotted Date: Aug 19, 2024 - 12:21pm



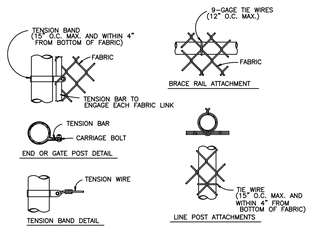
SWING GATE
N.T.S.



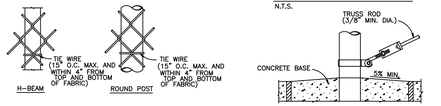
CHAIN-LINK FENCE DETAIL
N.T.S.



BRACE RAIL CLAMP DETAIL
N.T.S.

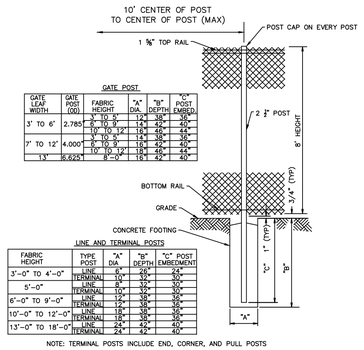


FASTENING DETAILS
N.T.S.



LINE POST ATTACHMENTS
N.T.S.

TRUSS ROD AND BAND
N.T.S.



GATE LEAF WIDTH	GATE POST (OD)	FABRIC HEIGHT	"A" DIA.	"B" DEPTH	"C" POST EMBED.
3' TO 6'	2.785"	5'-0" TO 9'-0"	12"	36"	60"
		10'-0" TO 12'-0"	18"	42"	66"
7' TO 12'	4.000"	5'-0" TO 9'-0"	18"	42"	66"
		10'-0" TO 12'-0"	18"	48"	72"
13'	6.625"	8'-0"	18"	42"	66"

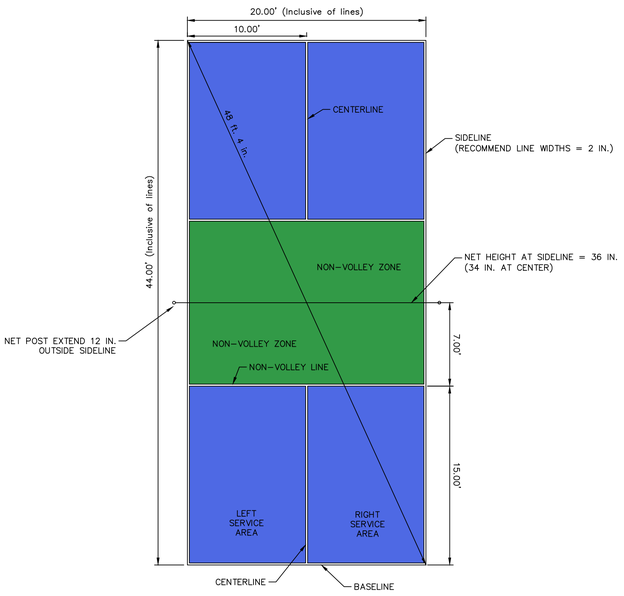
GATE POST

FABRIC HEIGHT	TYPE POST	"A" DIA	"B" DEPTH	"C" POST EMBEDMENT
3'-0" TO 4'-0"	LINE	6"	36"	42"
	TERMINAL	10"	32"	50"
5'-0"	LINE	8"	32"	50"
	TERMINAL	10"	32"	50"
6'-0" TO 9'-0"	LINE	12"	36"	56"
	TERMINAL	12"	36"	56"
10'-0" TO 12'-0"	LINE	18"	36"	56"
	TERMINAL	18"	36"	56"
13'-0" TO 18'-0"	LINE	24"	42"	66"
	TERMINAL	24"	42"	66"

LINE AND TERMINAL POSTS

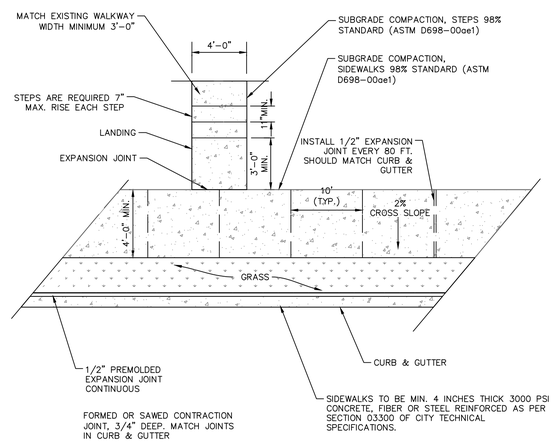
NOTE: TERMINAL POSTS INCLUDE END, CORNER, AND PULL POSTS

CHAIN LINK FENCE FOUNDATION
N.T.S.



LINE TOLERANCES:
- NET LINE TO OUTSIDE OF NVZ LINE: 7' +/- 1/8"
- NET LINE TO OUTSIDE OF BASELINE: 22' +/- 1/4"
- OUTSIDE SIDELINE TO OUTSIDE SIDELINE: 20' +/- 1/4"
- OUTSIDE SIDELINE TO CENTERLINE: 10' +/- 1/8"
- DIAGONAL DIMENSION TO OUTSIDE OF LINES: 48' 4" +/- 3/4"

PICKLE BALL COURT DIMENSIONS
N.T.S.



NOTES:
1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF HINESVILLE STANDARD SPECIFICATIONS.
2. CONTRACTION JOINTS SHOULD BE FORMED OR SAWED COINCIDENT WITH THE 10' JOINTS IN THE CURB.
3. ADA COMPLIANT WHEELCHAIR RAMPS SHALL BE INSTALLED AT EACH INTERSECTION OR DESIGNATED CROSSWALK LOCATION AND MUST MEET THE MOST CURRENT ADA STANDARDS AT THE TIME OF CONSTRUCTION.

SIDEWALK AND WALKWAY DETAILS
N.T.S.

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
SITE DETAILS

REVISIONS:
1. 8/19/2024
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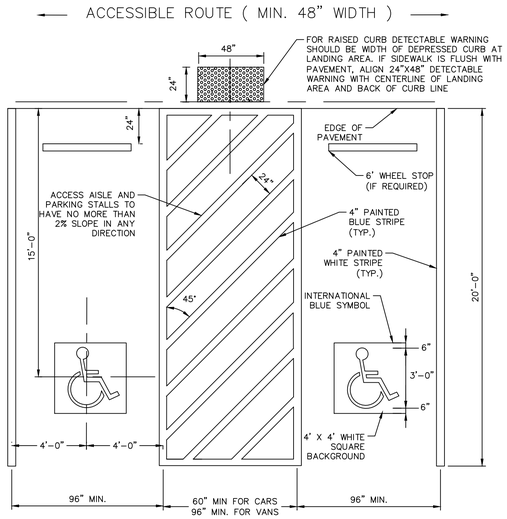
INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C8.3

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Printed By: Forrest Gowdy
Plotted Date: Aug 19, 2024 - 12:21pm



NOTE:

1. STRIPING AND CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL AND STATE REGULATIONS.

2. ALL PAVEMENT MARKINGS AND STRIPING IN THE RIGHT-OF-WAY SHALL BE THERMOPLASTIC.

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(912) 876-2164
www.libertycountyga.com

STANDARD CONSTRUCTION DETAILS
ADA HANDICAP PARKING SPACE STRIPING DETAIL

DETAIL NUMBER: P15

APPROVED: COUNTY ENGINEER

DATE: OCTOBER 2019 | SCALE: N.T.S

NOTE:

SIGNAGE SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LIBERTY COUNTY CODES AND SPECIFICATIONS.

HANDICAP SIGN

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STANDARD CONSTRUCTION DETAILS
HANDICAP PARKING SIGN DETAIL

DETAIL NUMBER: P14

APPROVED: COUNTY ENGINEER

DATE: OCTOBER 2019 | SCALE: N.T.S

ALTERNATIVE METHOD:

REMOVE 10 FT (MIN) SECTION OF EXISTING MAIN AND INSTALL STANDARD MANHOLE AND LENGTH OF NEW PIPE. AS WITH DOGHOUSE TYPE MANHOLES, THE NEW PIPE WILL HAVE TO BE CUT INSIDE THE MANHOLE TO RECEIVE THE FLOWS FROM THE NEW SYSTEM EXTENSION.

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STANDARD CONSTRUCTION DETAILS
STANDARD PRECAST DOGHOUSE MANHOLE

DETAIL NUMBER: D13D

APPROVED: COUNTY ENGINEER

DATE: OCTOBER 2019 | SCALE: N.T.S

NOTE:
MANHOLE FRAME AND COVER: US FOUNDRY 170-E OR EQUAL. LID TO BE LETTERED "DRAINS TO RIVER", "STORM", "MADE IN USA", AND FOUNDRY STAMP

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STANDARD CONSTRUCTION DETAILS
MANHOLE COVER & FRAME DETAIL

DETAIL NUMBER: D16

APPROVED: COUNTY ENGINEER

DATE: OCTOBER 2019 | SCALE: N.T.S

NOTE: REFER TO GDOT DETAIL #1011-AP "STANDARD PRECAST REINFORCED CONCRETE MANHOLE" FOR CONSTRUCTION SPECIFICATIONS AND DIMENSIONS.

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STANDARD CONSTRUCTION DETAILS
STANDARD PRECAST CONCRETE MANHOLE

DETAIL NUMBER: D13

APPROVED: COUNTY ENGINEER

DATE: OCTOBER 2019 | SCALE: N.T.S

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 0170A022 CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
SITE DETAILS

REVISIONS:
1. 8/19/2024
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INITIAL DATE: 05/31/2024
DRAWN BY: FPGD
CHECKED BY: TRL
PROJECT #: 2024-40

SHEET NUMBER:
C8.4

Drawing File: G:\ACTIVE PROJECTS\2024-40 H - Liberty Independent Troop Park Pickle Ball\900-DRAWINGS\DWG\2024-40.dwg
Drawing Type: Construction Plans
Plotted Date: Aug 19, 2024 - 12:21pm

GENERAL NOTES: (APPLICABLE TO ALL DRAWINGS)

G1. ALL WORK SHALL COMPLY WITH 2020 NEC, GEORGIA 2021 AMENDMENTS, AND ALL STATE AND LOCAL ORDINANCES.

G2. WHEN CONDUCTOR SIZE IS INDICATED FOR BRANCH CIRCUIT HOME RUN, THE CONDUCTOR SIZE INDICATED SHALL BE USED FOR THE COMPLETE CIRCUIT.

G3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE PROVIDED FOR ALL BRANCH AND FEEDER CIRCUITS.

G4. THE LOCATION AND MOUNTING HEIGHTS OF DEVICES AND OUTLETS INDICATED ON THE ELECTRICAL PLANS ARE SCHEMATIC. INTENDED ONLY TO CONVEY THE APPROXIMATE LOCATION. THE ACTUAL LOCATION AND MOUNTING HEIGHTS SHALL BE COORDINATED IN FIELD.

G5. PROVIDE ELECTRONIC ASTRONOMIC TIME SWITCHES, 6 ZONES, INTERMATIC ET912815CR OR APPROVED EQUAL TO CONTROL CIRCUITS LPB-2,4,6,8,10,12 PLUS 6 SPARE ZONES. PROGRAM AS DIRECTED BY OWNER. PROVIDE BOX ADJACENT TO TIME SWITCH WITH IDENTIFIED TERMINAL STRIP TO TRANSITION FIELD WIRING TO NO.10 TO CONNECT SWITCH.

G6. PROVIDE ELECTRONIC PHOTOCONTROL (INTERMATIC EK4236S OR EQUAL) LOCATION ON FRAME. VERIFY EXACT LOCATION AND CONNECTIONS IN FIELD.

G7. RECEPTACLE PEDESTALS SHALL BE PEDDC POWER SOLUTIONS 5"x5"x18" 304 PAINTED STAINLESS STEEL, 14 GA BODY, 7 GA BASE PLATE, DUAL GFCI PLATE WITH BLACK POWDER COAT FINISH. PART: SP-1B-C-HT-BK-140. FURNISH WITH TWO WEATHER AND TAMPER RESISTANT RECEPTACLES. SEE SPECIFICATIONS: ONE GFCI AND ONE USB

G8. PROVIDE 304SS NEMA 4X WHITE POWDER ENCLOSURE WITH 3-POINT LATCH. MATCH KEY TO PANELBOARD.

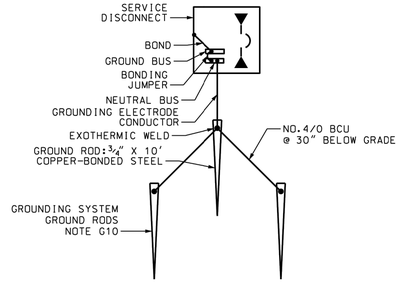
G9. THE BASIS OF DESIGN IS NLS LIGHTING VUE-2 FIXTURES. TENNIS OPTICS 5000°K COLOR TEMP. 6" DIRECT POLE ARM. ROUND POLE ADAPTOR. BLACK TEXTURED FINISH. CAT. NO. VUE-2/TT/80L/1/50K7/UNV/DPS6/BLK/RPA5(TBD). THE FIXTURE(S) SHALL BE MOUNTED 20' ABOVE GRADE TO DIRECT BURY FIBERGLASS POLE: THE BASIS OF DESIGN IS A WHATLEY COMPOSITE POLE - TR45: ROUND, TAPERED, BLACK, TEXTURED, TOP POLE CAP WITH FACTORY DRILLED FOR SIDE MOUNT ARMS. TOTAL SHAFT LENGTH - 24', 4' BURIAL DEPTH. WIND LOADING - 5.6 @ 120MPH. CAT. NO. TR45-20-DE-BLK-TXT-DTC.

G10. PROVIDE GROUNDING SYSTEM FOR COURT FACILITY.
- A. PROVIDE NO.4/0 BARE COPPER AT 30" BELOW GRADE AS SHOWN.
- B. PROVIDE NO.6 BCU JUMPER FROM GROUND RING TO EACH CORNER POST, EACH GATE POST (BOTH SIDES), EACH END OF THE EQUIPMENT FRAME, EACH RECEPTACLE PEDESTAL, AND EACH LIGHT POLE.
- C. BOND SERVICE TO GROUNDING SYSTEM.
- D. ALL CONNECTIONS TO 4/0 BCU SHALL BE EXOTHERMIC. CONNECTIONS TO POSTS, FRAME, AND PEDESTAL SHALL BE BY MECHANICAL LUG. CONNECT TO CIRCUIT EQUIPMENT GROUNDING CONDUCTOR AT LIGHT POLE AND RECEPTACLE PEDESTAL.

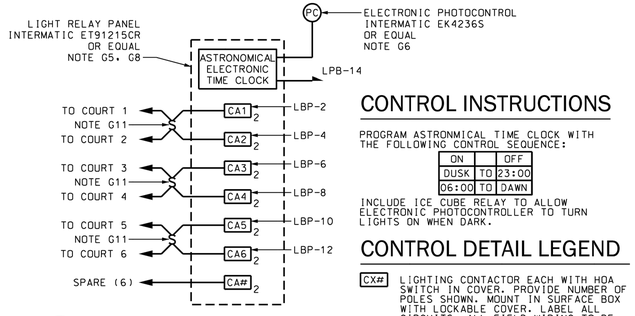
G11. PROVIDE THREE DPST TOGGLE SWITCHES (HUBBELL HBL1202) IN WEATHERPROOF TYPE OUTLET BOXES (CAT. NO. 2-GANG: BELL 5343-O, 1-GANG: BELL 5330-O) AND WEATHERPROOF SWITCH PLATE (2-GANG: BELL 5124-5, 1-GANG: BELL 5121-5). THE SWITCHES SHALL BE MOUNTED ADJACENT TO THE LIGHTING RELAY PANEL. ROUTE THE CIRCUITS THROUGH THE SWITCHES AFTER THE RELAY PANEL. PROVIDE MANUAL ON/OFF WHILE STILL CONTROLLED BY THE TIME CLOCK FOR USEABLE HOURS.

ELECTRICAL LEGEND

- HOME RUN
- CONDUITS OVERHEAD
- CONDUITS UNDERGROUND
- GROUNDING SYSTEM CONDUCTOR NOTE G10
- PANELBOARD
- EQUIPMENT AS NOTED
- LED AREA LIGHT NOTE G9
- DOUBLE DUPLEX RECEPTACLE MOUNTED IN PEDESTAL, NOTE G7
- SP — SURGE PROTECTION
- PP — UTILITY POWER PEDESTAL
- PC — ELECTRONIC PHOTOCONTROLLER INTERMATIC EK4436SM OR EQUAL
- GROUND ROD LOCATION ¾" X 10' COPPER BONDED ROD. NOTE G10.



1 E1.1 SECONDARY ELECTRICAL GROUNDING
NOT TO SCALE



2 E1.1 CONTROL RISER DIAGRAM
NOT TO SCALE

CONTROL INSTRUCTIONS

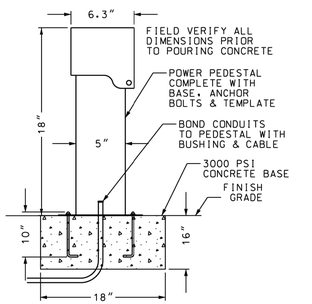
PROGRAM ASTRONMICAL TIME CLOCK WITH THE FOLLOWING CONTROL SEQUENCE:

ON		OFF
DUSK	TO	23:00
06:00	TO	DAWN

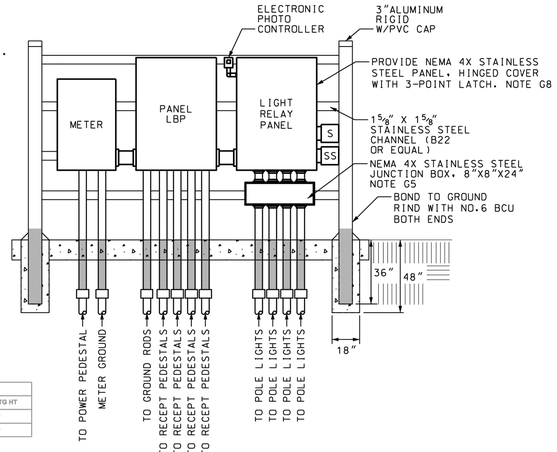
INCLUDE ICE CUBE RELAY TO ALLOW ELECTRONIC PHOTOCONTROLLER TO TURN LIGHTS ON WHEN DARK.

CONTROL DETAIL LEGEND

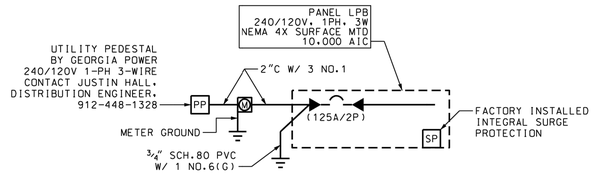
CX# — LIGHTING CONTACTOR EACH WITH HOA SWITCH IN COVER. PROVIDE NUMBER OF POLES SHOWN. MOUNT IN SURFACE BOX WITH LOCKABLE COVER. LABEL ALL CIRCUITS. ALL FIELD WIRING TO BE LANDED ON IDENTIFIED TERMINAL STRIP. CONTROL CONTACTORS FROM TIME CLOCK.



3 E1.1 RECEPTACLE PEDESTAL DETAIL
NOT TO SCALE



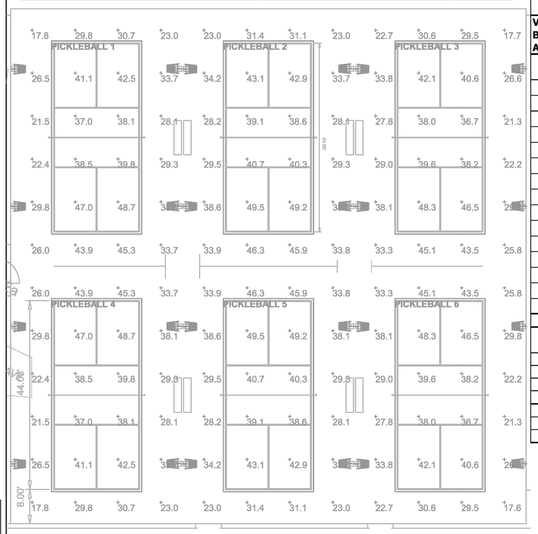
4 E1.1 EQUIPMENT RACK
NOT TO SCALE



6 E1.1 ONE-LINE DIAGRAM
NOT TO SCALE

Luminaire Schedule								
Symbol	Qty	Label	LLF	Arrangement	Description	Lum Watts	MTG HT
	8	N1	0.940	Single	VUE-2-TT-80L-1-50K-SINGLE	263	20
	8	N2	0.940	Back-Back	VUE-2-TT-80L-1-50K-TWIN	263	20

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE CLACS	Illuminance	Fc	34.59	49.5	17.6	1.97	2.81
PICKLEBALL 1	Illuminance	Fc	41.59	48.7	37.0	1.12	1.32
PICKLEBALL 2	Illuminance	Fc	42.93	49.5	38.6	1.11	1.28
PICKLEBALL 3	Illuminance	Fc	41.25	48.3	36.7	1.12	1.32
PICKLEBALL 4	Illuminance	Fc	41.59	48.7	37.0	1.12	1.32
PICKLEBALL 5	Illuminance	Fc	42.93	49.5	38.6	1.11	1.28
PICKLEBALL 6	Illuminance	Fc	41.25	48.3	36.7	1.12	1.32



5 E1.1 PHOTOMETRY PLAN
NOT TO SCALE

SCHEDULE OF PANEL 'LPB'

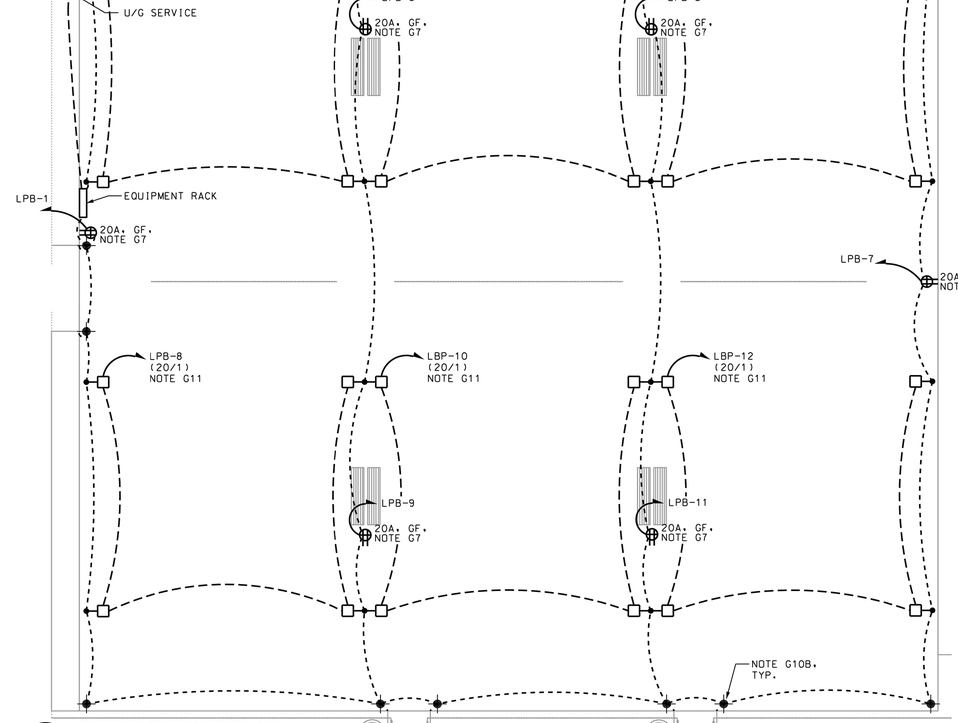
VOLTAGE: 240 / 120 — PHASE: 1 — WIRE: 3
BUS AMPS: 125 A — DEVICE AMPS: 125 A — MCB — NEMA: 4X
A.I.C RATING: 10,000 A — MOUNTING: SURFACE

LOCATION DESCRIPTION	LOAD (KVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (KVA)	LOCATION DESCRIPTION
RECEPT A	0.4	B	20A/1P	1	A	2	20A/1P	A	1.1	COURT-1
RECEPT B	0.4	B	20A/1P	3	B	4	20A/1P	A	1.1	COURT-2
RECEPT C	0.4	B	20A/1P	5	A	6	20A/1P	A	1.1	COURT-3
RECEPT D	0.4	B	20A/1P	7	B	8	20A/1P	A	1.1	COURT-4
RECEPT E	0.4	B	20A/1P	9	A	10	20A/1P	A	1.1	COURT-5
RECEPT F	0.4	B	20A/1P	11	B	12	20A/1P	A	1.1	COURT-6
SPARE			20A/1P	13	A	14	20A/1P	H	0.1	TIME CLOCK
SPARE			20A/1P	15	B	16	20A/1P			SPARE
SPARE			A/1P	17	A	18	20A/1P			SPARE
SPARE			20A/1P	19	B	20	20A/1P			SPARE
SPARE			20A/1P	21	A	22	20A/1P			SPARE
SPARE			20A/1P	23	B	24	20A/1P			SPARE
SPARE			20A/1P	25	A	26	20A/1P			SPARE
SPARE			20A/1P	27	B	28	20A/1P			SPARE
SPARE			20A/1P	29	A	30	20A/1P			SPARE

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. KVA	Demand KVA	2017 NEC Reference	Load Type	DESCRIPTION	Conn. KVA	Demand KVA	2017 NEC Reference
A	Lighting	6.6	8.3	NEC Article 215.3	E	Heating	0.0	0.0	NEC Article 220.60
B	Receptacles	2.4	2.4	NEC Table 220.44	F	Largest Motor	0.0	0.0	NEC Article 440.7
C	Kitchen Equipment	0.0	0.0	NEC Table 220.56	G	Other Motors	0.0	0.0	NEC Article 440.7
D	Air-Conditioning	0.0	0.0	NEC Article 220.60	H	Other Loads	0.1	0.1	

Phase A Connected Load	4.6 KVA	Notes: Provide With 4XSS Enclosure	TOTAL CONNECTED LOAD	9.1 KVA	37.9	AMPS
Phase B Connected Load	4.5 KVA	Furnish Panel with Integral	TOTAL DEMAND LOAD	10.8 KVA	44.8	AMPS
		Surge Protection: 120kA	MINIMUM SIZING AMPS	16.8 KVA	70.0	AMPS



7 E1.1 SITE LIGHTING PLAN
SCALE: 1" = 10' - 0"

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SITE DEVELOPMENT PLAN
PICKLEBALL COURTS
LIBERTY INDEPENDENT TROOP PARK

TAX PARCEL 070A002- CITY OF HINESVILLE, LIBERTY COUNTY, GEORGIA

SHEET NAME:
SITE LIGHTING PLAN

REVISIONS:
1. 7/22/2024
2.
3.
4.
5.
6.
7.
8.
9.
10

INITIAL DATE: 07/19/2024
DRAWN BY: JV
CHECKED BY: CC
PROJECT #: 2024-40

SHEET NUMBER:
E1.1

CADD PLOT
22-JUL-2024
15:46
CCOBB

E:\Hinesville Liberty Rec Park PB - 24069.00\CADD\E1.1.dgn