

SITE DEVELOPMENT PLANS

LLELA KAYAK LAUNCH

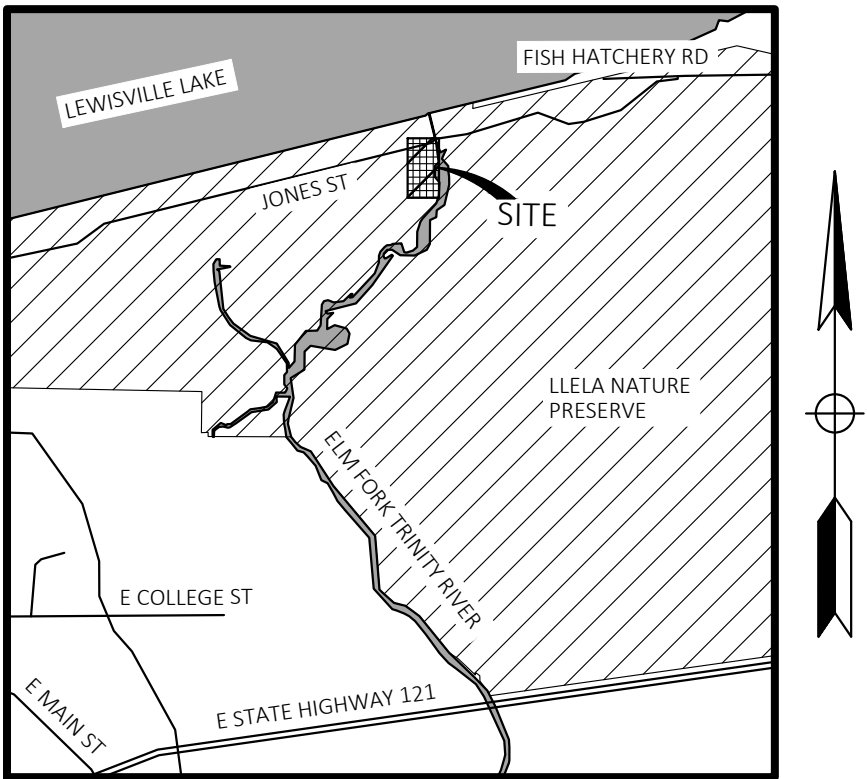
LEWISVILLE LAKE

LEWISVILLE LAKE SPILLWAY, E JONES ST

LEWISVILLE, TX 75057

GENERAL NOTES:

- A. TOPOGRAPHIC BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY THE FOLLOWING COMPANY, AS A CONTRACTOR TO THE SELLER/OWNER:
- TOPOGRAPHY: CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
(972) 488-3737
- B. ALL PHASES OF SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE OWNER / DEVELOPER SITE WORK SPECIFICATIONS.
- C. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF EXISTING STRUCTURES, RELATED UTILITIES, PAVING, UNDERGROUND STORAGE TANKS AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED. SEE SITE WORK SPECIFICATIONS.
- D. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- E. THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
- F. WARRANTY/DISCLAIMER: THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON A CONTEMPORANEOUS BASIS AT THE SITE.
- G. SAFETY NOTICE TO CONTRACTOR: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.
- H. ALL CONSTRUCTION IN STATE HIGHWAY DEPARTMENT RIGHT-OF-WAY SHALL BE COORDINATED WITH THE HIGHWAY DEPARTMENT RESIDENT ENGINEER.
- I. WETLANDS NOTE: ANY DEVELOPMENT, EXCAVATION, CONSTRUCTION, OR FILLING IN A U.S. CORPS OF ENGINEERS DESIGNATED WETLAND IS SUBJECT TO LOCAL, STATE AND FEDERAL APPROVALS. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS AND/OR RESTRICTIONS AND ANY VIOLATION WILL BE SUBJECT TO FEDERAL PENALTY. THE CONTRACTOR SHALL HOLD THE OWNER/DEVELOPER, THE ENGINEER AND THE LOCAL GOVERNING AGENCIES HARMLESS AGAINST SUCH VIOLATION. CONTRACTOR TO UTILIZE THE PLACEMENT OF MATS FOR CONSTRUCTION ACTIVITIES WITHIN WETLANDS OR MUDEFLATS TO MINIMIZE SOIL DISTURBANCE.
- J. RESIDENT ENGINEERING SERVICES: WHEN REQUESTED BY THE OWNER, RESIDENT ENGINEERING SERVICES SHALL BE PROVIDED BY THE ENGINEERS (ON A TIME AND FREQUENCY BASIS) ACCEPTABLE TO THE CITY ENGINEER FOR IMPROVEMENTS TO PUBLIC WATER MAINS, PUBLIC SEWER, AND CITY STREETS. AT THE COMPLETION OF CONSTRUCTION, THE ENGINEER SHALL CERTIFY THE CONSTRUCTION TO BE IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS. THIS WORK WILL BE AT THE OWNER/DEVELOPER'S DIRECT EXPENSE AND SHALL BE COORDINATED WITH CEI ENGINEERING ASSOCIATES, INC. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE RESIDENT ENGINEER OF ANY PRECONSTRUCTION / CONSTRUCTION CONFERENCES AND ANY PUBLIC CONSTRUCTION 24 HOURS PRIOR TO SAID ACTION.



VICINITY MAP
NOT TO SCALE

CEI CONTACT:

NAME: CLIF RODGERS
EMAIL: CLIF.RODGERS@CEIENG.COM
PHONE: (479) 273-9472

CLIENT CONTACT:

NAME: CHRIS CHASTAIN
EMAIL: CCHASTAIN@CITYOFLEWISVILLE.COM
PHONE: (469) 635-5487

PLAN INDEX:

- C0.0 COVER SHEET
C1.0 DEMOLITION PLAN
C2.0 TREE PRESERVATION PLAN
C2.1 TREE PRESERVATION NOTES & DETAILS
C2.2 TREE MITIGATION PLAN
C2.3 TREE MITIGATION NOTES & DETAILS
C3.0 OVERALL SITE PLAN
C3.1 SITE PLAN
C4.0 GRADING PLAN
C5.0 PLAN & PROFILE - WATER ACCESS RAMP
C6.0 EROSION CONTROL PLAN
C6.1 EROSION CONTROL NOTES & DETAILS
C7.0 DETAIL SHEET 1
C7.1 DETAIL SHEET 2

ASSOCIATED PLANS:

1. SURVEY

RESOURCE LIST:

TCEQ
12100 PARK 35 CIRCLE
AUSTIN, TX 78753
PHONE: (512) 239-1000
EMAIL: INFO@TCEQ.TEXAS.GOV

CITY OF LEWISVILLE
1197 W. MAIN ST.
LEWISVILLE, TX 75029
PHONE: (972) 219-3400

USACE
KARGER CHANDLER SANFORD
1801 N. MILL ST
LEWISVILLE, TX 75057
PHONE: (469) 645-9100
EMAIL: CHANDLER.R.SANFORD@USACE.ARMY.MIL

INTEGRATED ENVIRONMENTAL
SOLUTIONS, LLC
RUDY REINECKE
301 W ELDORADO PKWY, STE. 101
MCKINNEY, TX 75069
(972) 562-7672
EMAIL: CHANDLER.R.SANFORD@RREINECKE@INTENVSQL.COM

Approved for Construction		
CITY DEPARTMENT	DATE	SIGNATURE
PLANNING AND ZONING		
ENGINEERING		
BUILDING INSPECTION		
FIRE PREVENTION		
PUBLIC SERVICES		
ADA		
PARKS		

Approved for Construction			
UTILITY	COMPANY	DATE	SIGNATURE
ELECTRIC			
GAS (IF APPLICABLE)			
TELECOMMUNICATIONS			
CABLE			
SOLID WASTE			

FLOOD CERTIFICATION:

BY SCALED MAP LOCATION AND GRAPHICAL PLOTTING ONLY. THIS PROPERTY IS DETERMINED TO BE LOCATED WITHIN ZONE 'A', OR AREAS OUTSIDE THE 0.2% ANNUAL CHANCE 100-YR FLOODPLAIN AS DETERMINED BY THE NATIONAL FLOOD INSURANCE PROGRAM. FLOOD INSURANCE MAP FOR DENTON COUNTY, TEXAS. MAP NUMBER: 48121C0555G MAP REVISED: 04-18-2011



Know what's below.
Call before you dig.



CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE • LAND SURVEYING • PLANNING

BENTONVILLE | DALLAS | FRESNO | HOUSTON | JACKSONVILLE | MINNEAPOLIS | PHILADELPHIA | PHOENIX



CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

COVER SHEET

SHEET TITLE
SHEET NUMBER

C0.0



4

8

SITE BENCHMARK

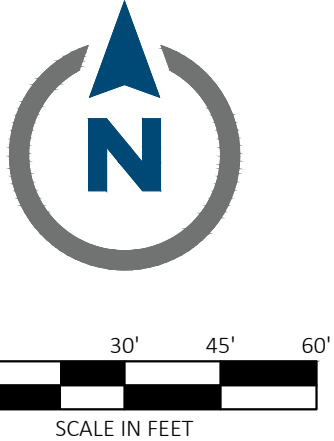
BENCHMARK #1: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 214' EAST OF A METAL FENCE POST.
ELEV= 446.72 NAVD83
N: 7,075,066.13
E: 2,438,724.29

BENCHMARK #2: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 260' SOUTHEAST OF A METAL FENCE POST.
ELEV= 448.40 NAVD83
N: 7,074,353.70
E: 32,438,944.83

BENCHMARK #3: A MAGNAIL WITH WASHER STAMPED "CEI CONTROL" APPROXIMATELY 72' NORTHWEST OF TRAIL DESCRIPTION SIGN.
ELEV= 448.40 NAVD83
N: 7,074,353.70
E: 32,438,944.83

4

8



Know what's below.
Call before you dig.

EXISTING LEGEND

Control Line

Break Line

Flow Line

GAS

Gas Line

FOC

Underground Fiber Optic Line

OHE

Overhead Electric Line

SS

Sanitary Sewer Line

(Size)

Storm Drainage Pipe

UGT

Underground Telephone Line

W

Water Line

Metal Fence Line

Edge of Gravel

Benchmark (BM)

Found Monument (As Noted)

Floodway Boundary

Wetland Boundary

Floodplain Area

◇

Set 5/8" Rebar "LSWXXXX"

○

Standpipe

○

Electric Meter

→

Guy Wire / Anchor

⌵

Utility Pole

⌵

Telephone Riser

●

Ballard / Guard Post

⌵

Traffic Sign (Type of Sign)

⌵

Tree (Deciduous)

⌵

Tree (Evergreen)

CITY TREE PRESERVATION REQUIREMENTS			
REQUIREMENT		SURVEYED	PROVIDED
PROTECTED TREES	HEALTHY TREES THAT ARE 8" DBH CALIPER & LARGER	(16) PROTECTED; (11) UNPROTECTED	6 UNPROTECTED TREES REMOVED (4 LIVE; 2 DEAD)
PRESERVATION CREDITS	POST OAKS & BLACKJACK OAKS LESS THAN 8" DBH CALIPER +1" FOR EVERY 1" PRESERVED PROTECTED POST OAKS AND BLACKJACK OAKS +2" FOR EVERY 1" PRESERVED ALL OTHER PROTECTED TREES +1" FOR EVERY 1" PRESERVED	(4) 8" POST OAKS (16) PROTECTED TREES - VARIOUS SIZES	208" PRESERVATION CREDIT

TREE PRESERVATION LIST

NUMBER	SPECIES	SIZE	HEALTH	PROTECTED
1	DECIDUOUS	16"	GOOD	YES
2	DECIDUOUS	10"	GOOD	YES
3	DECIDUOUS	8"	GOOD	YES
4	DECIDUOUS	14"	GOOD	YES
5	DECIDUOUS	8"	GOOD	YES
6	DECIDUOUS	6"	GOOD	NO
7	DECIDUOUS	6"	GOOD	NO
8	DECIDUOUS	10"	GOOD	YES
9	DECIDUOUS	10"	GOOD	YES
10	POST OAK	8"	GOOD	YES
11	DECIDUOUS	8"	GOOD	YES
12	POST OAK	8"	GOOD	YES
13	POST OAK	8"	GOOD	YES
14	POST OAK	8"	GOOD	YES
15	DECIDUOUS	16"	GOOD	YES
16	DECIDUOUS	6"	GOOD	NO
17	DECIDUOUS	6"	GOOD	NO
18	DECIDUOUS	14"	GOOD	NO
19	DECIDUOUS	10"	GOOD	NO
20	DECIDUOUS	10"	GOOD	NO
21	DECIDUOUS	10"	GOOD	YES
22	DECIDUOUS	6"	GOOD	NO
23	EVERGREEN	18"	FAIR	YES
24	DECIDUOUS	18"	GOOD	YES
25	DEAD	46"	DEAD	NO
26	DECIDUOUS	6"	FAIR	NO
27	DEAD	18"	DEAD	NO

TREE PRESERVATION TOTALS

SPECIES	CALIPER SIZE	TREE TOTAL	HEALTH
PRESERVED	208"	21	GOOD
REMOVED	40"	4	GOOD
REMOVED	64"	2	DEAD

PROPOSED LEGEND

TREE PROTECTION AREA

TREE PROTECTION FENCE

EDGE OF WOODED AREA

EXISTING TREE TO BE REMOVED

EXISTING TREE TO BE PRESERVED AND PROTECTED

TREE PROTECTION NOTES

- 77A

EXISTING TREE TO BE REMOVED, INCLUDING STUMP AND ROOTS.
- 77B

EXISTING TREE TO BE REMOVED, STUMP TO BE CUT FLUSH WITH FINISHED GRADE AND LEFT IN PLACE.
- 77D

AREA TO REMAIN UNDISTURBED.
- 77E

EXISTING PLANT MATERIAL TO BE CUT AND CLEARED INCLUDING ALL STUMPS AND ROOTS

TREE PROTECTION DETAILS

- 50H

TREE PROTECTION DETAIL
- 90A

SOIL COMPACTION PREVENTION DETAIL

TREE PRESERVATION PLAN NOTES

1.

ALL TREES AND NATURAL AREAS SHOWN ON THIS PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2.

PROTECTIVE FENCES SHALL BE ERRECTED ACCORDING TO CITY OF LEWISVILLE STANDARDS FOR TREE PROTECTION.
3.

PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4.

EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.
5.

PROTECTIVE FENCES SHALL SURROUND THE TREE OR GROUP OF TREES AND WILL BE LOCATED AT THE DRIPLINE. FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT ON CONSTRUCTION IN ORDER TO PREVENT THE FOLLOWING:

A.)

SOIL COMPACTION IN THE ROOT ZONE RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT.

B.)

ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6") ROOT TRENCHING NOT VIEWED BY CITY ARBORISTS.

C.)

WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.

D.)

OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING AND FIRES.
6.

EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES,

A.)

WHERE THERE IS TO BE AN APPROVE GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT.

B.)

WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIPLINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE)
7.

WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TRUNK, PROTECT THE TRUNK WITH STRAPPED ON PLANKING TO HEIGHT OF 8 FEET (OR LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8.

TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9.

ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10.

ANY TRENCHING REQUIRED SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11.

NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12.

PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.
13.

ALL FINISHED PRUNING MUST BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE AMERICAN NATIONAL STANDARD, ANSI-A300 PRUNING, OR LATER CITY CERTIFIED TREE PRUNER MUST BE RETAINED TO MAKE ALL PRUNING CUTS.
14.

DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

GENERAL TREE PRUNING NOTES

1.

TREES PRUNING SHALL BE PERFORMED BY A QUALIFIED TREE CARE PROFESSIONAL UNDER THE SUPERVISION OF A CERTIFIED ARBORIST AND IN COORDINATION WITH THE LANDSCAPE ARCHITECT.
2.

TREES SHALL NOT BE "TOPPED".
3.

NO MORE THAN 20% OF THE LIVING TREE CANOPY SHALL BE REMOVED IN ONE GROWING SEASON.
4.

PRUNING SHALL BE DONE DURING LATE WINTER WHEN THE TREES DORMANT SEASON OR IN MID SUMMER ONCE THE LEAVES HAVE REACHED THEIR FULL SIZE. ONLY LIGHT PRUNING (LESS THAN 10% OF THE FOLIAGE) SHALL BE DONE OTHER TIMES OF THE YEAR.
5.

TREES SHALL NOT BE PRUNED DURING TIMES OF EXTENDED DROUGHT OR IF THE TREE IS UNDER STRESS.
6.

DEAD OR DAMAGED WOOD CAN BE REMOVED AT ANY TIME, AS NEEDED.
7.

LIMBS SHALL BE PRUNED TO A MINIMUM OF 7' ABOVE WALKWAYS AND 8' ABOVE VEHICULAR AREAS.

CEI

Solutions for Land and Life

CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

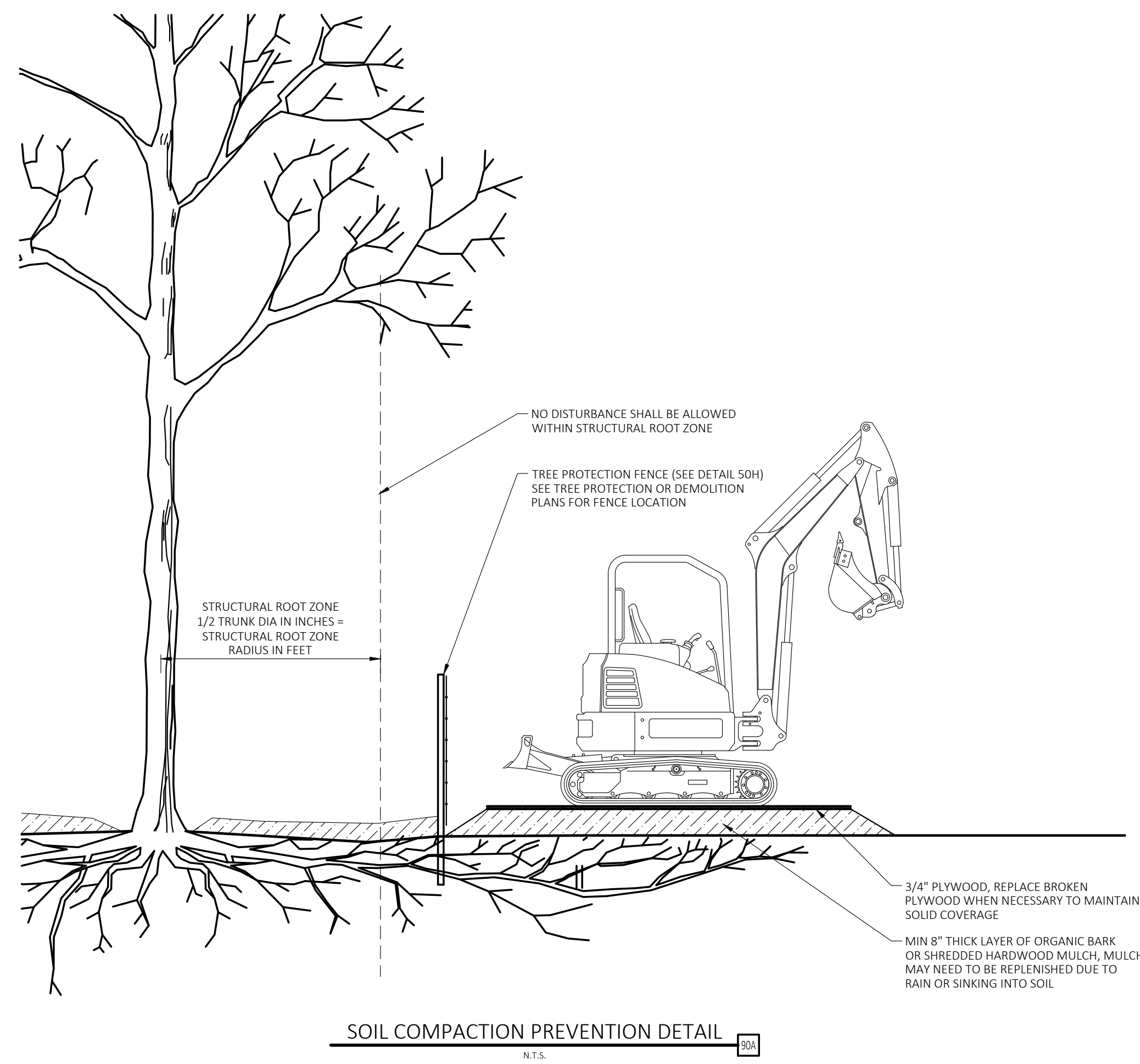
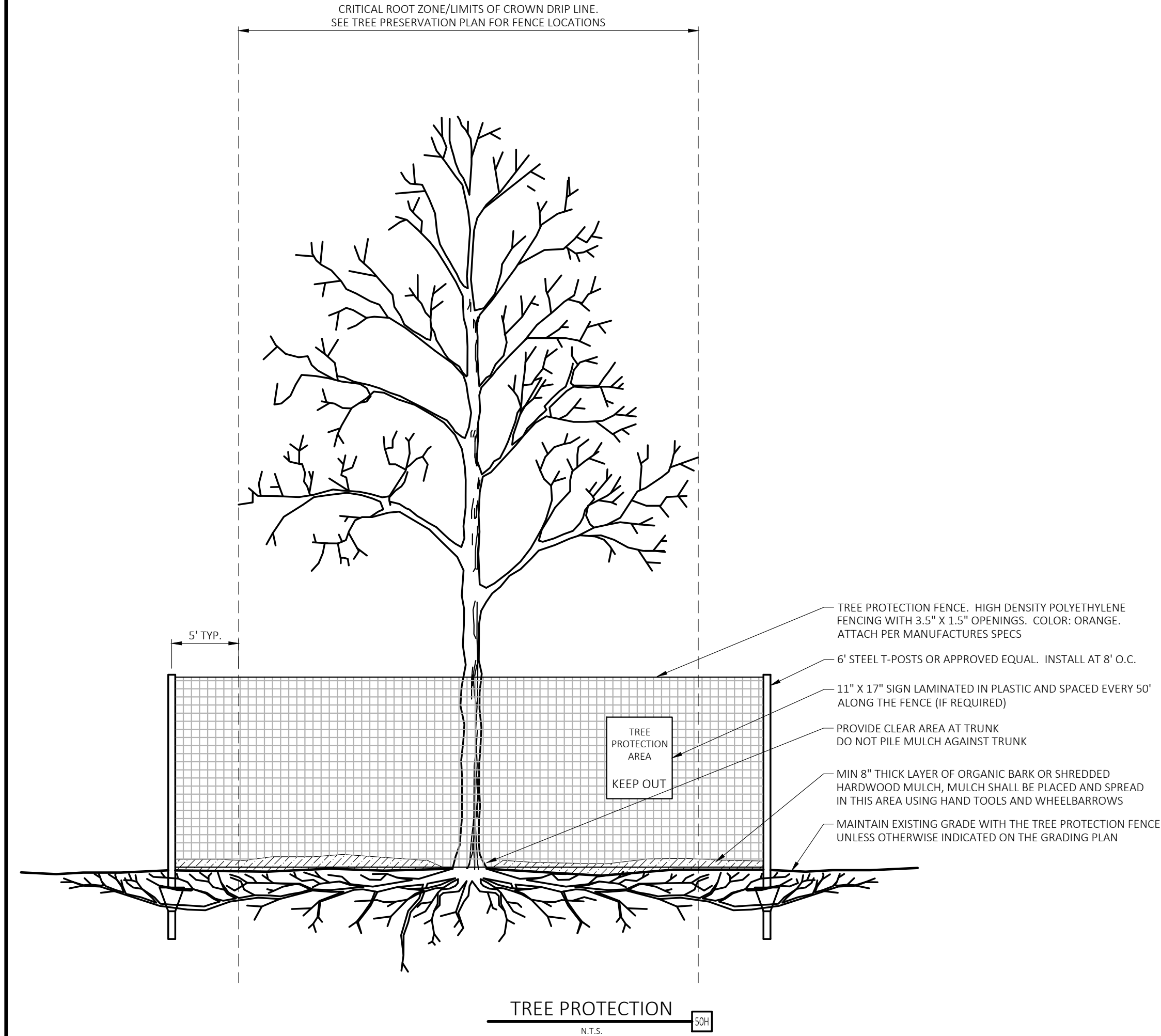
LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057

PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	12/18/2025
REVISION	REV-1

TREE PRESERVATION PLAN
SHEET TITLE
SHEET NUMBER

C2.0

DRAWING LOCATION: P:\33000\33855\DRAWINGS\DESIGNWORKING\33855_1_TPDWG - SAVED BY: WJWALLCOTE
© 2025 CEI ENGINEERING ASSOCIATES, INC.



LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	12/18/2025
REVISION	REV-1

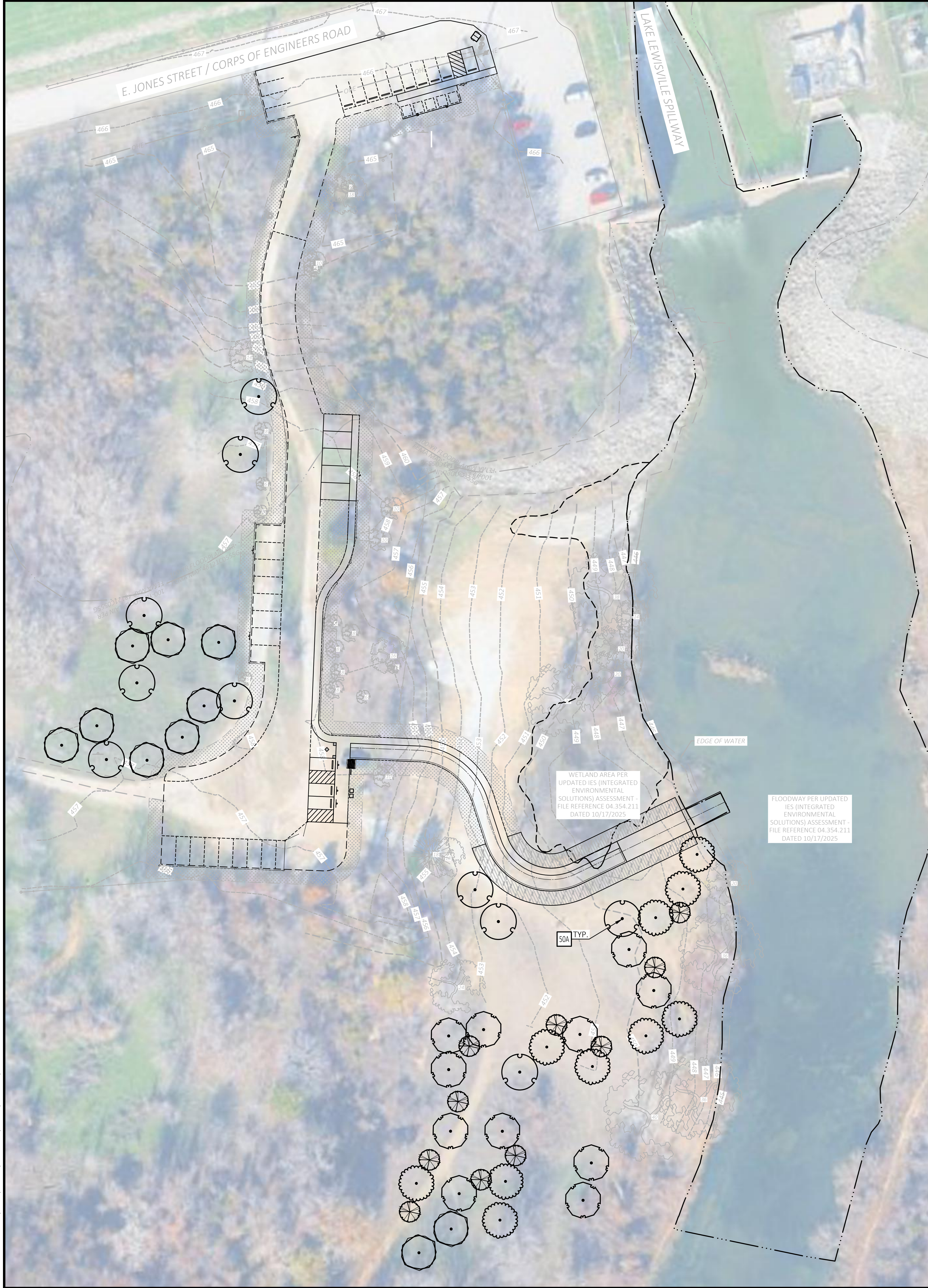
TREE PRESERVATION
NOTES & DETAILS

SHEET TITLE
SHEET NUMBER

C2.1

DRAWING LOCATION: P:\33000\33855\1\DRAWINGS\DESIGNWORKING\33855.1.TP.DWG - SAVED BY: WMA\JLCOTE

© 2025 CEI ENGINEERING ASSOCIATES, INC.

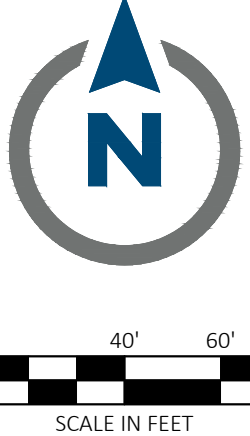


SITE BENCHMARK

BENCHMARK #1: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 214' EAST OF A METAL FENCE POST.
ELEV: 466.72' NAVD83
N: 7,075,066.13
E: 2,438,724.29

BENCHMARK #2: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 200' SOUTHWEST OF A METAL FENCE POST.
ELEV: 448.40' NAVD83
N: 7,074,353.70
E: 32,438,944.83

BENCHMARK #3: A MAGNAIL WITH WASHER STAMPED "CEI CONTROL" APPROXIMATELY 17' NORTHWEST OF TRAIL DESCRIPTION SIGN.
ELEV: 448.40' NAVD83
N: 7,074,353.70
E: 32,438,944.83



Know what's below.
Call before you dig.

EXISTING LEGEND

- | | | | |
|--------------|----------------------------|----------|-----------------------------|
| ----- | Control Line | ◇ | Set 5/8" Rebar "LSWXXXX" |
| ----- | Break Line | ○ | Standpipe |
| ----- | Flow Line | ⊙ | Electric Meter |
| ----- | GAS | → | Guy Wire / Anchor |
| ----- | FOC | → | Utility Pole |
| ----- | OHE | ⊠ | Telephone Riser |
| ----- | SS | ● | Ballard / Guard Post |
| ----- (Size) | Storm Drainage Pipe | ⊗ (Size) | Traffic Sign (Type of Sign) |
| ----- | UGT | ⊗ (Size) | Tree (Deciduous) |
| ----- | Underground Telephone Line | ⊗ (Size) | Tree (Evergreen) |
| ----- | Water Line | | |
| ----- | Metal Fence Line | | |
| ----- | Edge of Gravel | | |
| ----- | Benchmark (BM) | | |
| ----- | Found Monument (As Noted) | | |
| ----- | Floodway Boundary | | |
| ----- | Wetland Boundary | | |
| ----- | Floodplain Area | | |

TREE MITIGATION DETAILS

50A TREE PLANTING DETAIL

TREE MITIGATION GENERAL NOTES

A. REFER TO TREE MITIGATION NOTES SHEET FOR NOTES AND DETAILS

2025-11-20 14:47

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE	DETAIL	CAL.
TREES					
	10	CERCIS CANADENSIS / EASTERN REDBUD	B&B	50A	2.00" CAL.
	10	FRAXINUS ALBICANS / TEXAS ASH	B&B	50A	2.00" CAL.
	10	PLATANUS OCCIDENTALIS / AMERICAN SYCAMORE	B&B	50A	2.00" CAL.
	11	QUERCUS MACROCARPA / BURR OAK	B&B	50A	2.00" CAL.
	10	QUERCUS SHUMARDII / SHUMARD OAK	B&B	50A	2.00" CAL.

TREE MITIGATION CALCULATIONS

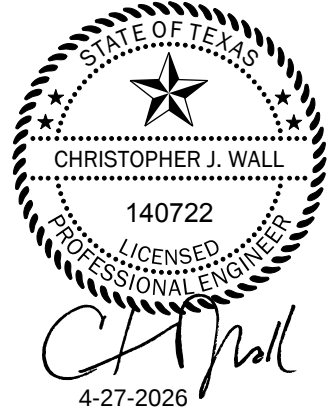
TOTAL CALIPER INCHES REMOVED = 34"	MITIGATION RATION - 3:1 34 x 3 = 102 MITIGATION INCHES REQUIRED	(51) 2" CALIPER TREES PROPOSED = 102 MITIGATION INCHES PROVIDED
------------------------------------	--	--

*REFER TO TREE PRESERVATION PLAN



CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	12/18/2025
REVISION	REV-1

TREE MITIGATION PLAN

SHEET TITLE
SHEET NUMBER

C2.2

DRAWING LOCATION: P:\23000\23855\1\DRAWINGS\DESIGNWORKING\23855.1.TP.DWG - SAVED BY: WMA\LICOTE

GENERAL NOTES

1.

CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL PROPOSED LANDSCAPING IS INSTALLED IN ACCORDANCE WITH PLANS, DETAILS, SPECIFICATIONS (IF APPLICABLE) AND ALL LOCAL CODES AND REQUIREMENTS.

2.

CONTRACTOR TO INSPECT SITE AND VERIFY CONDITIONS AND DIMENSIONING PRIOR TO PROCEEDING WITH WORK DESCRIBED HERE IN. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING ANY CONSTRUCTION.

3.

QUANTITIES PROVIDED IN THE PLANT LIST ARE FOR GENERAL USE ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLANT AND LANDSCAPE MATERIAL QUANTITIES. SYMBOL COUNT ON PLAN TAKES PRECEDENCE OVER TABLE QUANTITIES.

4.

IMMEDIATELY AFTER AWARD OF CONTRACT, NOTIFY THE OWNER'S REPRESENTATIVE AND/OR THE LANDSCAPE ARCHITECT OF UNAVAILABILITY OF SPECIFIED PLANT MATERIAL FROM COMMERCIAL NURSERIES. THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT WILL PROVIDE ALTERNATE PLANT MATERIAL SELECTIONS IF UNAVAILABILITY OCCURS. SUCH CHANGES SHALL NOT ALTER THE ORIGINAL BID PRICE UNLESS A CREDIT IS DUE TO THE OWNER.

5.

ALL PLANT MATERIALS TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1.

6.

CONTAINER GROWN STOCK SHOULD HAVE GROWN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL TOGETHER.

7.

ANY PLANT SUBSTITUTIONS, RELOCATION, OR REQUIRED CHANGE SHALL REQUIRE THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNER.

8.

THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT RESERVE THE RIGHT TO REFUSE ANY MATERIAL THEY DEEM UNACCEPTABLE.

9.

COORDINATE WITH PROJECT REPRESENTATIVE FOR DISTURBED SITE TREATMENTS OUTSIDE LANDSCAPE IMPROVEMENTS. SEE SHEET 6.0 - EROSION CONTROL PLAN.

10.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION AT NO COST TO THE OWNER.

11.

ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.

12.

IF A SWPPP PLAN IS PROVIDED THIS PLAN IS TO BE IMPLEMENTED COOPERATIVELY WITH SWPPP PLAN, AS NEEDED, TO MAXIMIZE THE EFFECTIVENESS OF THE SWPPP PLAN FOR THIS SITE.

13.

ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.

14.

REFER TO CITY OF LEWISVILLE TREE SPECIES LIST FOR ACCEPTABLE SPECIES SUBSTITUTIONS

PLANTING NOTES

1.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING ALL PLANTED AREAS. ALL DELETERIOUS MATERIALS SUCH AS ROCK, TRASH, CONSTRUCTION DEBRIS, AGGREGATE BASE MATERIAL, ASPHALT, ETC. SHALL BE REMOVED PRIOR TO ANY FILL OPERATIONS. FILL ALL PLANTING AREAS WITH CLEAN EARTHEN FILL. SOIL SHALL BE FREE OF HEAVY, STIFF CLAY AND ANY DELETERIOUS MATERIAL OVER ONE INCH IN SIZE. THE TOP SIX INCHES OF FILL MATERIAL STRIPPED FROM SITE MAY BE UTILIZED FOR PLANTER OR TOPSOIL FILL IF PRIOR APPROVAL HAS BEEN OBTAINED FROM THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.

2.

TREES PLANTED ADJACENT TO PUBLIC ROADS AND PEDESTRIAN SIDEWALKS SHALL BE PRUNED SUFFICIENTLY TO AVOID VISUAL BLOCKS TO INTERSECTING VEHICULAR ACCESS OR INTERFERENCE WITH PEDESTRIAN WALKWAYS. TREES WITH A 4" OR LARGER CALIPER SHALL BE PRUNED UP TO 6'-0" ABOVE PAVEMENTS.

3.

BACKFILL ALL TREES, SHRUBS, GROUNDCOVER WITH A MIXTURE OF 2 PARTS NATIVE SOIL AND 1 PART SOIL CONDITIONING WITH WOOD MULCH.

4.

THE LANDSCAPE CONTRACTOR SHALL WATER TEST ALL PLANTING HOLE PRIOR TO PLANTING. IF HOLES DO NOT DRAIN PROPERLY, EXCAVATE FURTHER UNTIL IMPERMEABLE LAYER IS BREACHED. EXCAVATED PLANT PITS SHALL HAVE POSITIVE DRAINAGE. PLANT PITS (WHEN FULLY FLOODED WITH WATER) SHALL DRAIN WITHIN 1 HOUR OF FILLING. ENSURE THAT ALL PLANT PITS HAVE POSITIVE DRAINAGE.

5.

ALL PLANTING BEDS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE. PRE-EMERGENT HERBICIDE SHALL BE APPLIED PER MANUFACTURE'S RECOMMENDATIONS AND SHALL OCCUR AFTER TOPSOIL PLACEMENT AND PRIOR TO INSTALLATION OF PLANT MATERIALS AND MULCH.

6.

FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH A TIME RELEASE FERTILIZER PER BRAND'S SPECIFIED APPLICATION RATES.

7.

ALL TREES AND SHRUBS SHALL BE PLANTED IN SUCH A MANNER AS TO ENSURE THEIR SURVIVAL.

8.

ANY ROPE OR WIRE BINDING THE BALL SHALL BE CUT PRIOR TO PREVENT GIRDLING OF THE TREE. REMOVE WIRE, TWINE, AND BURLAP FROM THE TOP HALF OF ALL B&B PLANT MATERIAL.

9.

IF A NON-BIODEGRADABLE MATERIAL IS USED AROUND THE BALL, IT SHALL BE COMPLETELY REMOVED PRIOR TO BACKFILLING.

10.

CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.

11.

ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS. TREES & SHRUBS SHALL BE PLANTED AS SOON AS POSSIBLE AFTER DELIVERY.

12.

ALL TREES MUST BE STRAIGHT-TRUNKED, FULL-HEADED AND MEET ALL REQUIREMENTS SPECIFIED.

13.

ALL TREES MUST BE STAKED AS SHOWN IN THE DETAILS.

14.

NO SUBSTITUTIONS OR ALTERNATIVES WILL BE ALLOWED FOR GROUND SURFACE MATERIALS UNLESS APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT OR OWNER.

15.

MAINTAIN 5' MIN. HORIZONTAL SEPARATION BETWEEN TREE PLANTINGS AND ALL UTILITIES UNLESS OTHERWISE SPECIFIED.

16.

A FOUR INCH (4") TOP DRESSING/MULCHING OF SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES. (SEE PLANTING DETAILS) TOP DRESSING CAN BE WOOD MULCH, ROCK, OR ANY OTHER DECORATIVE MATERIAL SPECIFIED ON PLANS. SEE LANDSCAPE PLAN FOR TYPE.

17.

THE FOLLOWING PLANTING SEASONS ARE RECOMMENDED:
EVERGREEN SHRUBBERY NOVEMBER - MARCH
DECIDUOUS SHRUBBERY & TREES NOVEMBER - MARCH
EVERGREEN TREES NOVEMBER - MARCH

18.

CITY OF LEWISVILLE DOES NOT ALLOW TREE PLANTINGS BETWEEN THE MONTHS OF JUNE AND SEPTEMBER

PLANT GUARANTEE, REPLACEMENT AND MAINTENANCE

A.

GUARANTEE:
ACCEPTANCE OF TREE PLANTING SHALL BE BY LANDSCAPE ARCHITECT AND/OR OWNER. THE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITIES UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE WATERING, PRUNING AND OTHER OPERATIONS NECESSARY TO KEEP ALL TREES IN A THRIVING CONDITION. UPON FINAL ACCEPTANCE, OWNER SHALL ASSUME ALL MAINTENANCE RESPONSIBILITIES.

B.

REPLACEMENT:
ANY PLANT UNDER THIS SPEC WHICH IS DEAD, MISSING, UNHEALTHY, OR OTHERWISE NOT ACCEPTABLE AND NOT IN SATISFACTORY GROWING CONDITION DURING CONSTRUCTION MAINTENANCE PERIOD, OR AT THE END OF THE GUARANTEE PERIOD, SHALL BE REMOVED FROM SITE AND REPLACED WITH SUITABLE, ACCEPTABLE PLANT AS SPECIFIED, WITHIN FIVE (5) DAYS.

C.

MAINTENANCE:
GENERAL CONTRACTOR SHALL PROVIDE ONE YEAR OF LANDSCAPE MAINTENANCE, FROM THE TIME THE PROJECT RECEIVES THE CERTIFICATE OF OCCUPANCY AND THERE AFTER, FOR ALL NEW LANDSCAPE. IF EXISTING LANDSCAPE EXISTS ON-SITE, GENERAL CONTRACTOR IS TO PROVIDE THE OPTION OF MAINTENANCE FOR THE OWNER'S REVIEW.

HERBICIDES NOTES

1.

APPLICATION OF HERBICIDES SHALL BE IN COMPLIANCE WITH STATE PESTICIDES REGULATIONS. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CONSULT WITH THE REGULATORY AGENCIES FOR LOCAL HERBICIDES APPLICATION REQUIREMENTS.

2.

IF THERE IS A DISCREPANCY BETWEEN STATE REGULATIONS AND ADDITIONAL REQUIREMENTS BELOW, MOST STRINGENT SHALL RULE

3.

NO AERIAL APPLICATION OF HERBICIDES IS PERMITTED ON SITE.

4.

CARCINOGENS AND EPA TOXIC CATEGORY I AND II ARE PROHIBITED TO USE ON SITE.

DUCKBILL ANCHORS IN TRIANGULAR PATTERN. PASS TENSION STRAPS THROUGH D-RING IN EACH ANCHOR AND BACK TO EACH HAND RATCHET. TIGHTEN AND ADJUST TENSION STRAP FOR BEST FIT.

PLAN

FINISHED GRADE PER GRADING PLAN

12"(MIN.)

NOTES:
1. DEPICTION ABOVE IS FOR TREE PLANTING ON A SLOPE.
2. ALL OTHER SPECIFICATIONS SHALL BE AS SHOWN BELOW IN THE TREE PLANTING DETAIL.
3. SEE TREE PLANTING DETAIL BELOW FOR TREE ANCHORING SYSTEM.

TREE WRAP
4 INCH DEEP SAUCER
REMOVE BURLAP & ROPE FROM TOP 1/3 OF THE BALL
4 INCHES OF MULCH

12"(MIN.)

FINISHED GRADE, SEE GRADING PLAN

BACKFILL MIX PER SPECIFICATIONS
PLANTING PIT TO BE 2X THE DIAMETER OF THE ROOT BALL
UNDISTURBED SUBSOIL

DUCKBILL ANCHORS, DRIVE ANCHORS FULL DEPTH. D-RINGS TO REMAIN EXPOSED
DUCKBILL UNDERGROUND TREE ANCHOR OR EQUAL. MODEL 40-RBK FOR 2" CALIPER TREES. MODEL 60-RBK FOR 3" CALIPER TREES. INSTALL PER MANUFACTURER'S SPECIFICATIONS

NOTES:
1. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
2. CONTRACTOR TO ENSURE PERCOLATION OF PLANTING PITS PRIOR TO INSTALLATION.
3. CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT IF PERCOLATION CANNOT BE ACHIEVED.

TREE PLANTING

N.T.S.

200

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057

STATE OF TEXAS
CHRISTOPHER J. WALL
140722
LICENSED PROFESSIONAL ENGINEER
4-27-2026

PROFESSIONAL OF RECORD KAP
PROJECT MANAGER MCR
DESIGNER WCM
CEI PROJECT NUMBER 33855
DATE 12/18/2025
REVISION REV-1

TREE MITIGATION NOTES
SHEET TITLE
SHEET NUMBER

C2.3



SITE BENCHMARK

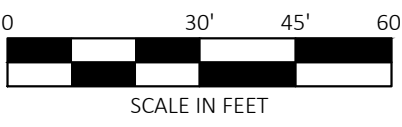
BENCHMARK #1: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 214' EAST OF A METAL FENCE POST.
ELEV: 446.75' NAVD83
N: 7,075,066.13
E: 32,438,724.29

BENCHMARK #2: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 260' SOUTHEAST OF A METAL FENCE POST.
ELEV: 448.40' NAVD83
N: 7,074,933.70
E: 32,438,944.83

BENCHMARK #3: A MAGNAIL WITH WASHER STAMPED "CEI CONTROL" APPROXIMATELY 173' NORTHWEST OF TRAIL DESCRIPTION SIGN.
ELEV: 448.40' NAVD83
N: 7,074,933.70
E: 32,438,944.83



Know what's below.
Call before you dig.



EXISTING LEGEND

	Control Line		Set 5/8" Rebar "LSWXXXX"
	Break Line		Standpipe
	Flow Line		Electric Meter
	Gas Line		Guy Wire / Anchor
	Underground Fiber Optic Line		Utility Pole
	Overhead Electric Line		Telephone Riser
	Sanitary Sewer Line		Ballard / Guard Post
	Storm Drainage Pipe		Traffic Sign (Type of Sign)
	Underground Telephone Line		Tree (Deciduous)
	Water Line		Tree (Evergreen)
	Metal Fence Line		
	Edge of Gravel		
	Benchmark (BM)		
	Found Monument (As Noted)		
	Floodway Boundary		
	Wetland Boundary		
	Floodplain Area		

PROPOSED LEGEND

	PROPERTY LINE/RIGHT OF WAY LINE
	EDGE OF CONCRETE
	6' BOARD FENCE
	STEEL PIPE FENCE
	CONCRETE RIBBON
	100-YEAR FLOODPLAIN
	LIMITS OF SIDEWALKS AND CONCRETE APRONS
	HEAVY DUTY CONCRETE PAVING
	PROPOSED GRAVEL SURFACE ROAD
	HYDROTURF RAMP SURFACE
	CROSSGRIP NON-SLIP PVC ON EXISTING GRADE
	HYDRO-SEED WITH STRAW EROSION MAT
	CROSSGRIP NON-SLIP PVC WITH COMPACTED AGGREGATE SUBBASE
	GEOSYSTEMS GEOPAVE AGGREGATE POURIOUS PAVEMENT WITH GRAVEL SURFACE
	HYDRO-SEED WITH STRAW EROSION MAT

WETLAND AREA PER
UPDATED IS INTEGRATED
ENVIRONMENTAL
SOLUTIONS ASSESSMENT
FILE REFERENCE OR ICA 211
DATED 10/17/2025

FLOODWAY PER UPDATE
IS INTEGRATED
ENVIRONMENTAL
SOLUTIONS ASSESSMENT
FILE REFERENCE OR ICA 211
DATED 10/17/2025

CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

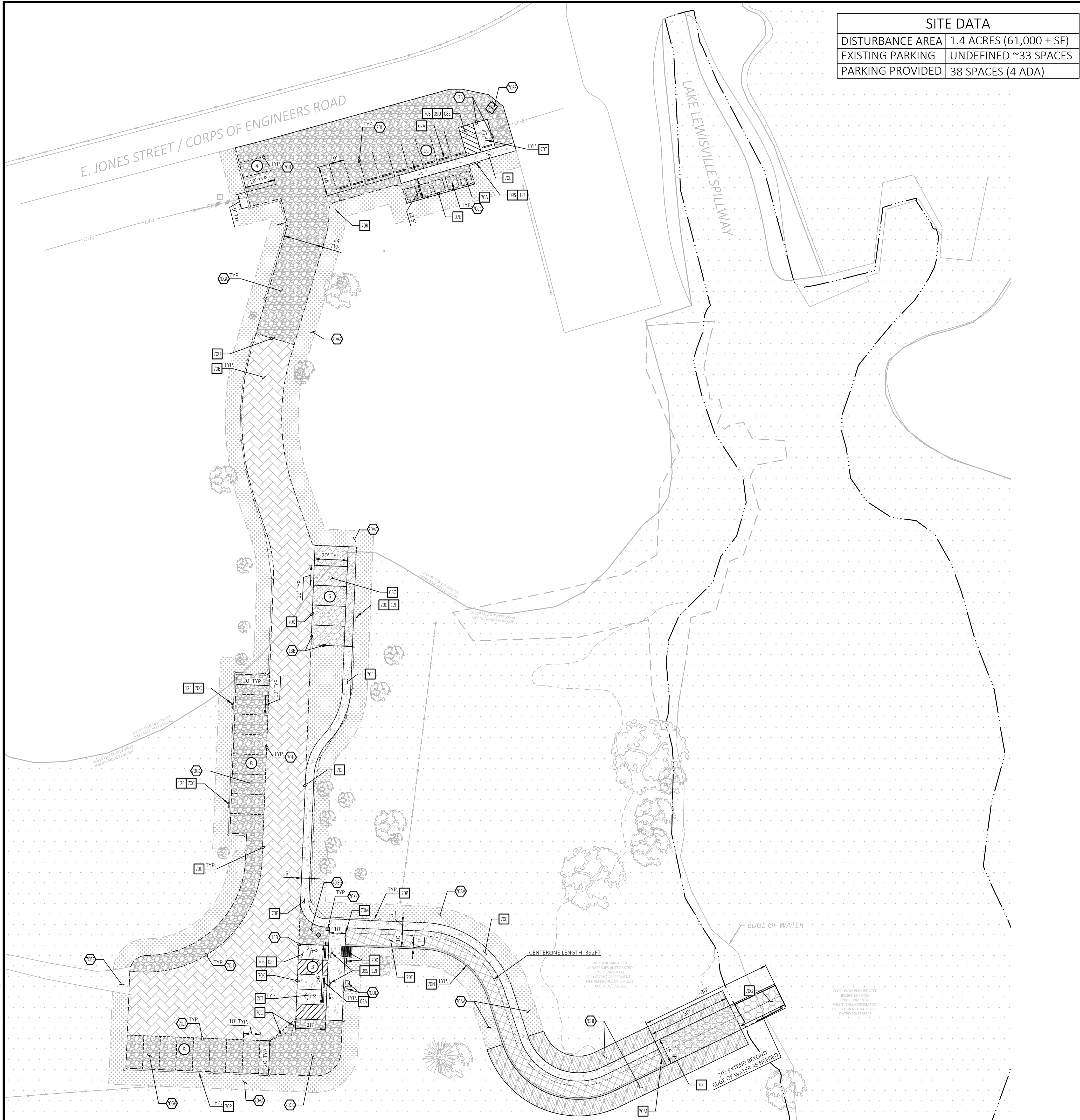
OVERALL SITE PLAN

SHEET TITLE
SHEET NUMBER

C3.0

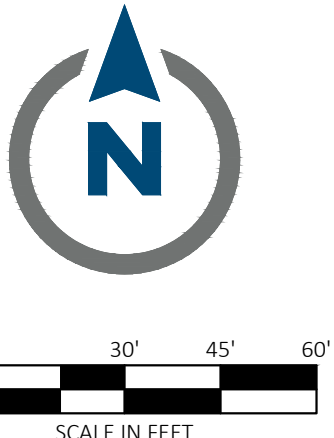
DRAWING LOCATION: P:\33000\33855\DRAWINGS\DESIGNWORKING\33855_1_S1.DWG - SAVED BY: WMAALCOTE

© 2026 CEI ENGINEERING ASSOCIATES, INC.



SITE DATA	
DISTURBANCE AREA	1.4 ACRES (61,000 ± SF)
EXISTING PARKING	UNDEFINED ~33 SPACES
PARKING PROVIDED	38 SPACES (4 ADA)

SITE BENCHMARK	
BENCHMARK #1: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 214' EAST OF A METAL FENCE POST. ELEV: 446.19 NAVD83 N: 7,075,066.13 E: 32,438,724.29	
BENCHMARK #2: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 260' SOUTHEAST OF A METAL FENCE POST. ELEV: 448.40 NAVD83 N: 7,074,953.70 E: 32,438,944.83	
BENCHMARK #3: A MAGNAIL WITH WASHER STAMPED "CEI CONTROL" APPROXIMATELY 117' NORTHWEST OF TRAIL DESCRIPTION SIGN. ELEV: 448.40 NAVD83 N: 7,074,953.70 E: 32,438,944.83	



EXISTING LEGEND

Control Line	Set 5/8" Rebar "LSXXXXXX"
Break Line	Standpipe
Flow Line	Electric Meter
Gas Line	Guy Wire / Anchor
FOC	Utility Pole
OHE	Overhead Electric Line
SS	Sanitary Sewer Line
Storm Drainage Pipe	Bollard / Guard Post
UGT	Underground Telephone Line
Water Line	Traffic Sign (Type of Sign)
Metal Fence Line	Tree (Deciduous)
Edge of Gravel	Tree (Evergreen)
Benchmark (BM)	
Found Monument (As Noted)	
Floodway Boundary	
Wetland Boundary	
Floodplain Area	

PROPOSED LEGEND

PROPERTY LINE/RIGHT OF WAY LINE	
EDGE OF CONCRETE	
6' BOARD FENCE	
STEEL PIPE FENCE	
CONCRETE RIBBON	
100-YEAR FLOODPLAIN	
LIMITS OF SIDEWALKS AND CONCRETE APRONS	
HEAVY DUTY CONCRETE PAVING	
PROPOSED GRAVEL SURFACE ROAD	
HYDROTURF RAMP SURFACE	
CROSSGRIP NON-SLIP PVC ON EXISTING GRADE	
HYDRO-SEED WITH STRAW EROSION MAT	
CROSSGRIP NON-SLIP PVC WITH COMPACTED AGGREGATE SUBBASE	
GEOSYSTEMS GEOPAVE AGGREGATE POUROUS PAVEMENT WITH GRAVEL SURFACE	
HYDRO-SEED WITH STRAW EROSION MAT	
PROPOSED PARKING SPACES	

GENERAL SITE NOTES

- ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL PARKING LOT SIGN BASE SUPPORTS SHALL BE INSTALLED PER DETAIL 12F.
- ALL ACCESSIBLE PARKING STALLS SHALL HAVE SIGNAGE INSTALLED PER DETAIL 09S.

SITE NOTES

- LIMITS OF HEAVY DUTY CONCRETE PAVING.
- 10' STRIP ALONG BOTH SIDES OF ADA PATH AND LAUNCH RAMP TO BE HYDROSEED WITH NATIVE SEED MIX. BELOW ELEV. 451' BIODEGRADABLE COIR MATTING TO BE SECURED ON TOP OF HYDROSEED AREAS WHEN GRADING EXCEEDS 4:1
- ADA COMPLIANT PORTA-POTTY
- WASTE BINS LOCATION, BINS PROVIDED BY OTHERS
- TRANSITION PROPOSED GRAVEL PARKING LOT INTO EXISTING GRAVEL DRIVE; SURFACE SHOULD BE RAKED FLUSH INTO EXISTING ROAD SURFACE
- PROPOSED RELOCATION OF EXISTING DUMPSTER
- GRAVEL SURFACE ROAD; NO SYNTHETIC REINFORCEMENT
- PYRAMAT SYNTHETIC EROSION CONTROL BLANKET; TOPPED WITH IN-SITU SOIL & SEEDING WITH NATIVE SEED MIX
- PARKING STALL LINE DISPLAYED FOR GRAPHICAL REPRESENTATION ONLY; DO NOT PAINT IN FIELD
- 24"x24"x24" MINIMUM EXTERIOR DIMENSIONS, CUT LIMESTONE BLOCKS; SPLIT FACE FINISH

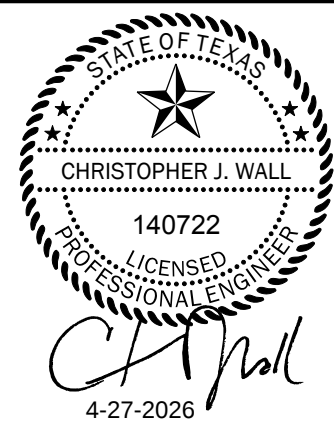
SITE DETAILS

- PRECAST CONCRETE WHEEL STOP
- 6' BOARD FENCE
- HEAVY DUTY CONCRETE PAVING
- STANDARD DUTY CONCRETE PAVING
- ACCESSIBLE / VAN ACCESSIBLE PARKING SIGN
- SIGN BASE
- PORTA-POTTY DROP-OFF AREA; COMPACTED GRAVEL PAD
- GEOSYSTEMS: GEOPAVE AGGREGATE POUROS PAVEMENT
- LEILA KAYAK SIGNAGE; "RESERVED KAYAK & CANOE PARKING"
- LEILA KAYAK & CANOE INFORMATION SIGNAGE; "NO UPSTREAM ACCESS" AND "LITTER DISPOSAL INFORMATION"
- CONCRETE SIDEWALK PER LEWISVILLE DETAIL
- HYDROTURF RAMP WITH CONCRETE SIDE ANCHORS
- LAUNCH SURFACE: CROSSGRIP NON-SLIP PVC GROUND ANCHORED INTO EXISTING GRADE
- CROSSGRIP NON-SLIP PVC SURFACE WITH COMPACTED AGGREGATE SUBBASE
- GEOPAVE & SIDEWALK
- GEOPAVE & HEAVY DUTY CONCRETE
- HYDROTURF ANCHOR TRENCH
- CONCRETE RIBBON
- STEEL PIPE FENCE
- STEEL PIPE HINGE GATE
- NON-ACCESSIBLE ROUTE SIGNAGE
- MODIFIED 90° ACCESSIBLE PARKING SPACE STRIPING
- ACCESSIBLE PARKING SYMBOL
- GEOPAVE & GRAVEL ROAD



CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

LEILA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

SITE PLAN

SHEET TITLE
SHEET NUMBER

C3.1



SITE BENCHMARK

BENCHMARK #1: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 214' EAST OF A METAL FENCE POST.
ELEV= 466.72 NAVD83
N: 7,075,066.13
E: 2,438,724.29

BENCHMARK #2: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 260' SOUTHWEST OF A METAL FENCE POST.
ELEV= 448.40 NAVD83
N: 7,074,353.70
E: 32,438,944.83

BENCHMARK #3: A MAGNAIL WITH WASHER STAMPED "CEI CONTROL" APPROXIMATELY 72' NORTHWEST OF TRAIL DESCRIPTION SIGN.
ELEV= 448.40 NAVD83
N: 7,074,353.70
E: 32,438,944.83

0

30'

45'

60'

SCALE IN FEET

N



Know what's below.
Call before you dig.

EXISTING LEGEND

--- Control Line

--- Break Line

--- Flow Line

--- GAS Gas Line

--- FOC Underground Fiber Optic Line

--- OHE Overhead Electric Line

--- SS Sanitary Sewer Line

--- (Size) Storm Drainage Pipe

--- UGT Underground Telephone Line

--- W Water Line

--- Metal Fence Line

--- Edge of Gravel

--- Benchmark (BM)

--- Found Monument (As Noted)

--- Floodway Boundary

--- Wetland Boundary

--- Floodplain Area

Set 5/8" Rebar "LSWXXXX"

Standpipe

Electric Meter

Guy Wire / Anchor

Utility Pole

Telephone Riser

Bollard / Guard Post

Traffic Sign (Type of Sign)

Tree (Deciduous)

Tree (Evergreen)

PROPOSED LEGEND

--- PROPERTY LINE/RIGHT OF WAY LINE

--- XXX CONTOUR ELEVATIONS

--- GRADE BREAK

--- FLOWLINE

x XX.XX

SPOT ELEVATIONS:
TC = TOP OF CURB
G = GUTTER
LP = LOW POINT
FG = FINISH GRADE

GENERAL GRADING NOTES

- A. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS (SEE LANDSCAPE PLAN FOR SEED MIX AND PROPER APPLICATION RATE). ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- B. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.

GRADING NOTES

18D MATCH EXISTING PAVEMENT ELEVATIONS.

FLOODPLAIN CUT/FILL COMPARISON TABLE			
AREA AFFECTED	CUT (CU. YDS)	FILL (CU. YDS)	NET (CU. YDS)
38,637.74 SF	221.12	179.87	41.25 (CUT)

OVERALL CUT/FILL COMPARISON TABLE			
AREA AFFECTED	CUT (CU. YDS)	FILL (CU. YDS)	NET (CU. YDS)
61,773.69 SF	422.13	355.57	66.56 (CUT)

CEI

Solutions for
Land and Life

CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057

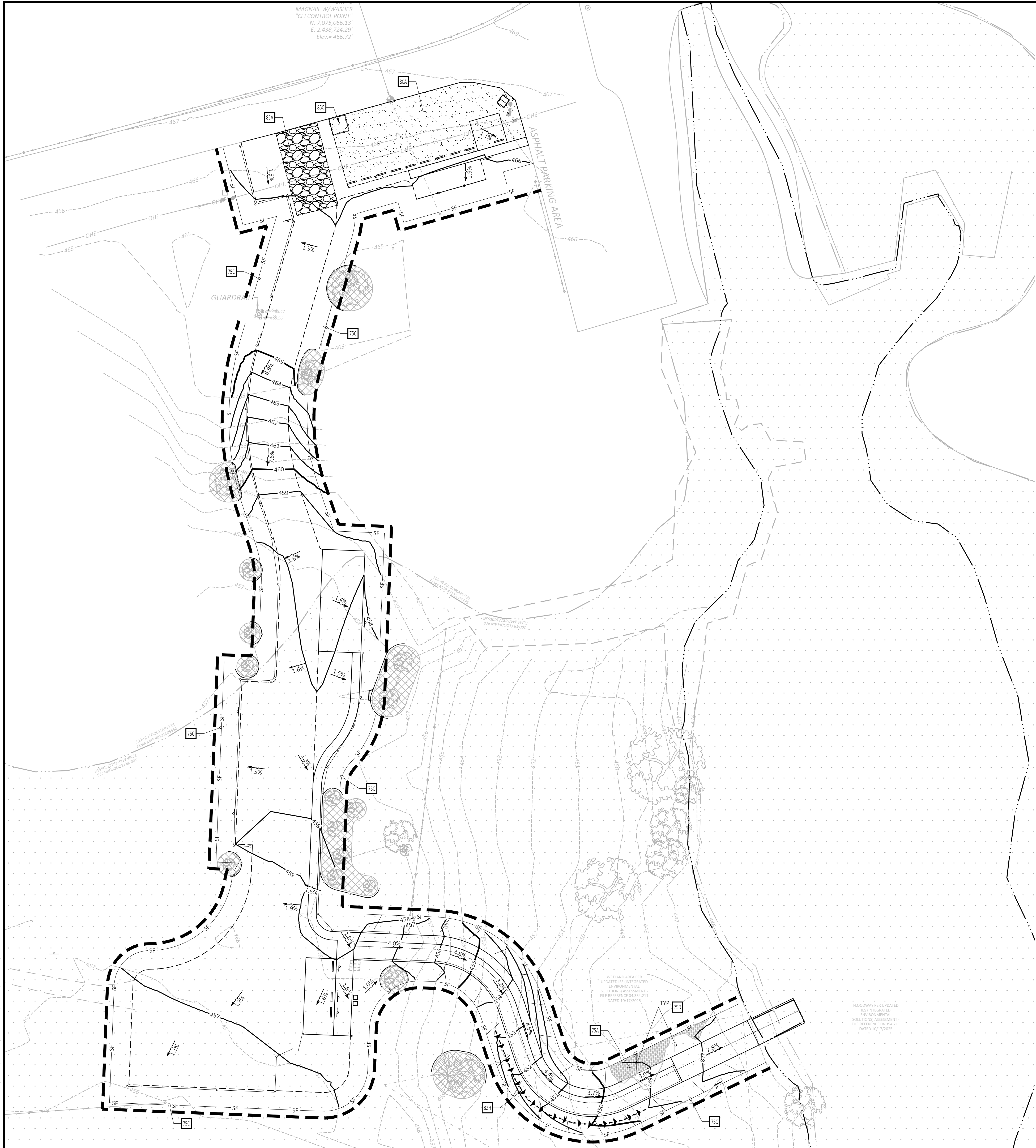


PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

GRADING PLAN

SHEET TITLE
SHEET NUMBER

C4.0



4

8

SITE BENCHMARK

BENCHMARK #1: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 214' EAST OF A METAL FENCE POST.
ELEV= 466.72' NAVD83
N: 7,075,066.13
E: 32,438,944.83

BENCHMARK #2: A 5/8" REBAR WITH YELLOW CAP STAMPED "CEI CONTROL" APPROXIMATELY 260' SOUTHWEST OF A METAL FENCE POST.
ELEV= 448.40' NAVD83
N: 7,074,353.70
E: 32,438,944.83

BENCHMARK #3: A MAGNAIL WITH WASHER STAMPED "CEI CONTROL" APPROXIMATELY 72' NORTHWEST OF TRAIL DESCRIPTION SIGN.
ELEV= 448.40' NAVD83
N: 7,074,353.70
E: 32,438,944.83

4

8

Know what's below.
Call before you dig.

SEQUENCE OF CONSTRUCTION

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
2. PREPARE TEMPORARY PARKING AND STORAGE AREA.
3. CONSTRUCT THE SILT FENCES ON THE SITE.
4. INSTALL ROCK CHECK DAMS
5. CLEAR AND GRUB THE SITE.
6. BEGIN GRADING THE SITE.
7. TEMPORARILY SEED DENUDEED AREAS.
8. PREPARE SITE GEOPAVE GRAVEL ROAD.
9. INSTALL RIBBON CURBS
10. PREPARE SITE FOR PAVING.
11. PAVE SITE.
12. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.
13. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED).

EXISTING LEGEND

	Control Line		Set 5/8" Rebar "LSWXXXX"
	Break Line		Standpipe
	Flow Line		Electric Meter
	GAS		Guy Wire / Anchor
	FOC		Utility Pole
	OHE		Telephone Riser
	SS		Ballard / Guard Post
	(Size)		Traffic Sign (Type of Sign)
	UGT		Tree (Deciduous)
	Water Line		Tree (Evergreen)
	Metal Fence Line		
	Edge of Gravel		
	Benchmark (BM)		
	Found Monument (As Noted)		
	Floodway Boundary		
	Wetland Boundary		
	Floodplain Area		

PROPOSED LEGEND

	PROPERTY LINE/RIGHT OF WAY LINE
	LIMITS OF DISTURBANCE
	CONTOUR ELEVATIONS
	GRADE BREAK
	SILT FENCE
	ROCK CHECK DAM
	CONCRETE WASHOUT
	CONSTRUCTION ENTRANCE
	WETLAND CONSTRUCTION MAT (MINIMUM COVERAGE AREA)

EROSION DETAILS

75A	WETLAND CONSTRUCTION MAT
75C	SILT FENCE
75D	SILT FENCE/J-HOOK
80A	LAYDOWN AREA
82H	ROCK CHECK DAM
85A	TEMPORARY STONE CONSTRUCTION ENTRANCE
85C	TEMPORARY CONCRETE WAS OUT

AREA OF DISTURBANCE = 1.4 ACRES (61,000 S.F.)

Solutions for
Land and Life

CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057

PROFESSIONAL OF RECORD	KAP
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

EROSION CONTROL
PLAN

SHEET TITLE
SHEET NUMBER

C6.0

DRAWING LOCATION: P:\33000\33855\DRAWINGS\DESIGNWORKING\33855_1.GP DWG - SAVED BY: VMALLCOTE

© 2026 CEI ENGINEERING ASSOCIATES, INC.

DRAWING LOCATION: P:\32000\32855\1\DRAWINGS\DESIGNWORKING\32855_1_GD.DWG - SAVED BY: VMALLCOTE

GENERAL EROSION NOTES

- A. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND THE STATE OF TEXAS NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- B. A COPY OF THE SWPPP AND EROSION CONTROL PLANS, INCLUDING APPLICABLE DETAIL SHEETS, MUST REMAIN ONSITE THROUGHOUT CONSTRUCTION AND MADE AVAILABLE TO THE PUBLIC UNTIL THE SITE IS TERMINATED AND/OR PERMANENTLY STABILIZED PER THE NPDES PERMIT.
- C. THE CONTRACTOR MUST UPDATE THE SWPPP AND EROSION CONTROL PLANS TO REFLECT THE PROGRESS OF CONSTRUCTION AND GENERAL CHANGES TO THE PROJECT SITE. CHANGES MAY INCLUDE BMP INSTALLATION, MODIFICATION, OR REMOVAL, CONSTRUCTION ACTIVITIES, CLEARING, GRUBBING, OR GRADING, AND TEMPORARY OR PERMANENT STABILIZATION.
- D. THE CONTRACTOR MUST ADHERE TO ANY HOURS OF WORK, NOISE LEVEL, OR OTHER CONSTRUCTION RELATED RESTRICTIONS IN ACCORDANCE WITH LOCAL OR STATE REGULATIONS.
- E. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ANY OFFSITE BORROW, SPOIL, OR STORAGE AREAS TO BE UTILIZED, BUT NOT PROVIDED WITHIN THE PROJECT'S LIMITS OF DISTURBANCE, ARE TO BE PROPERLY LICENSED AND PERMITTED.
- F. THE NPDES PERMIT DOES ALLOW CERTAIN NON-STORMWATER DISCHARGES AT THE CONSTRUCTION SITE, SEE NPDES PERMIT, SECTION FOR A COMPLETE LIST OF PERMITTED DISCHARGES. THESE DISCHARGES MUST BE TREATED BY AN ONSITE BMP PRIOR TO LEAVING THE SITE AND MUST NOT CAUSE EROSION OR DAMAGE TO DOWNSTREAM PROPERTIES AND INFRASTRUCTURE. ALL OTHER DISCHARGES ARE STRICTLY PROHIBITED UNLESS AN APPLICABLE PERMIT HAS BEEN OBTAINED PRIOR TO THE DISCHARGE BY THE CONTRACTOR.
- G. THE TEMPORARY PARKING AND STORAGE AREA SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AREA, EQUIPMENT CLEANING AREA, EMPLOYEE BREAK AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS AND TOILET FACILITIES. THE EXACT LOCATIONS SHALL BE COORDINATED WITH THE OWNER'S CONSTRUCTION MANAGER AND DEPICTED ON THE ONSITE EROSION CONTROL PLAN.
- H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT BETWEEN THESE MATERIALS AND STORM WATER THAT IS DISCHARGED FROM THE SITE.
- I. MAINTAIN ON THE SITE OR HAVE READILY AVAILABLE SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CONTAIN AND CLEAN UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- J. ADEQUATE HOUSEKEEPING MEASURES SHALL BE IMPLEMENTED SO THAT LOOSE TRASH, MATERIALS, TOOLS, AND EQUIPMENT ARE COLLECTED AND PROPERLY STORED AT THE CONSTRUCTION SITE.
- K. DUST ON THE SITE SHALL BE CONTROLLED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- L. NO RUBBISH, TRASH, GARBAGE OR OTHER SUCH MATERIALS SHALL BE DISCHARGED INTO DRAINAGE DITCHES, DRAINAGE STRUCTURES, OR WATERS OF THE STATE.
- M. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL STOP FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY STABILIZED IMMEDIATELY.
- O. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED. THESE AREAS SHALL BE STABILIZED IMMEDIATELY, BUT NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE LANDSCAPING PLAN.
- P. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. THE EXACT LOCATIONS SHALL BE COORDINATED WITH THE OWNER'S CONSTRUCTION MANAGER.
- Q. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- R. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AFTER THE STABILIZATION OF THE SITE AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS.
- S. IF SOIL STOCKPILING IS EMPLOYED ON THE SITE, SILT FENCES SHALL BE USED TO HELP CONTAIN THE SEDIMENT.
- T. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- U. SEDIMENT BASINS AND TRAPS ARE ATTRACTIVE TO CHILDREN AND CAN BE VERY DANGEROUS. IN ALL CASES, LOCAL AND/OR STATE ORDINANCES AND REGULATIONS REGARDING HEALTH AND SAFETY MUST BE ADHERED TO.
- V. ALL EXISTING AND PROPOSED STORM SEWER PIPES, DRAINAGE STRUCTURES, AND DRAINAGE DITCHES WITHIN THE PROJECT AREA SHALL BE CLEANED OF ANY TRASH AND ACCUMULATED SEDIMENT PRIOR TO FINAL STABILIZATION.
- W. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS AFTER FINAL STABILIZATION. FINAL STABILIZATION HAS OCCURRED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 75% COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES HAS BEEN EMPLOYED.
- X. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, WATTLES, ETC.) TO HELP PREVENT EROSION AND STORM WATER POLLUTION.
- Y. ALL OFF-SITE CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR STORM DRAINS & UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
- Z. IN AN EMERGENCY SITUATION, THE CONTRACTOR IS RESPONSIBLE FOR MODIFYING OR ADDING BMPS NECESSARY TO STOP POLLUTANT OR SEDIMENT DISCHARGES FROM THE CONSTRUCTION SITE AND PROTECT THE WATER QUALITY OF THE RECEIVING WATERBODY.
- AA. IF AN EXCAVATION NEEDS TO BE DEWATERED DUE TO A RECENT RAINFALL EVENT, THE CONTRACTOR CAN DEWATER THE EXCAVATION VIA A PUMPED FILTER BAG. THE PUMPED FILTER BAG MUST DISCHARGE ONTO A STABILIZED SURFACE AND UPSTREAM OF AN EROSION CONTROL BMP LIKE A SEDIMENT BASIN/TRAP, SILT FENCE, OR OTHER PERIMETER BMP. IT IS STRICTLY PROHIBITED TO DISCHARGE THE PUMPED FILTER BAG INTO A STORM DRAIN OR OTHER CONVEYANCE STRUCTURE WITHOUT THE RUNOFF BEING TREATED VIA AN EROSION CONTROL BMP FIRST.

SEQUENCE OF CONSTRUCTION

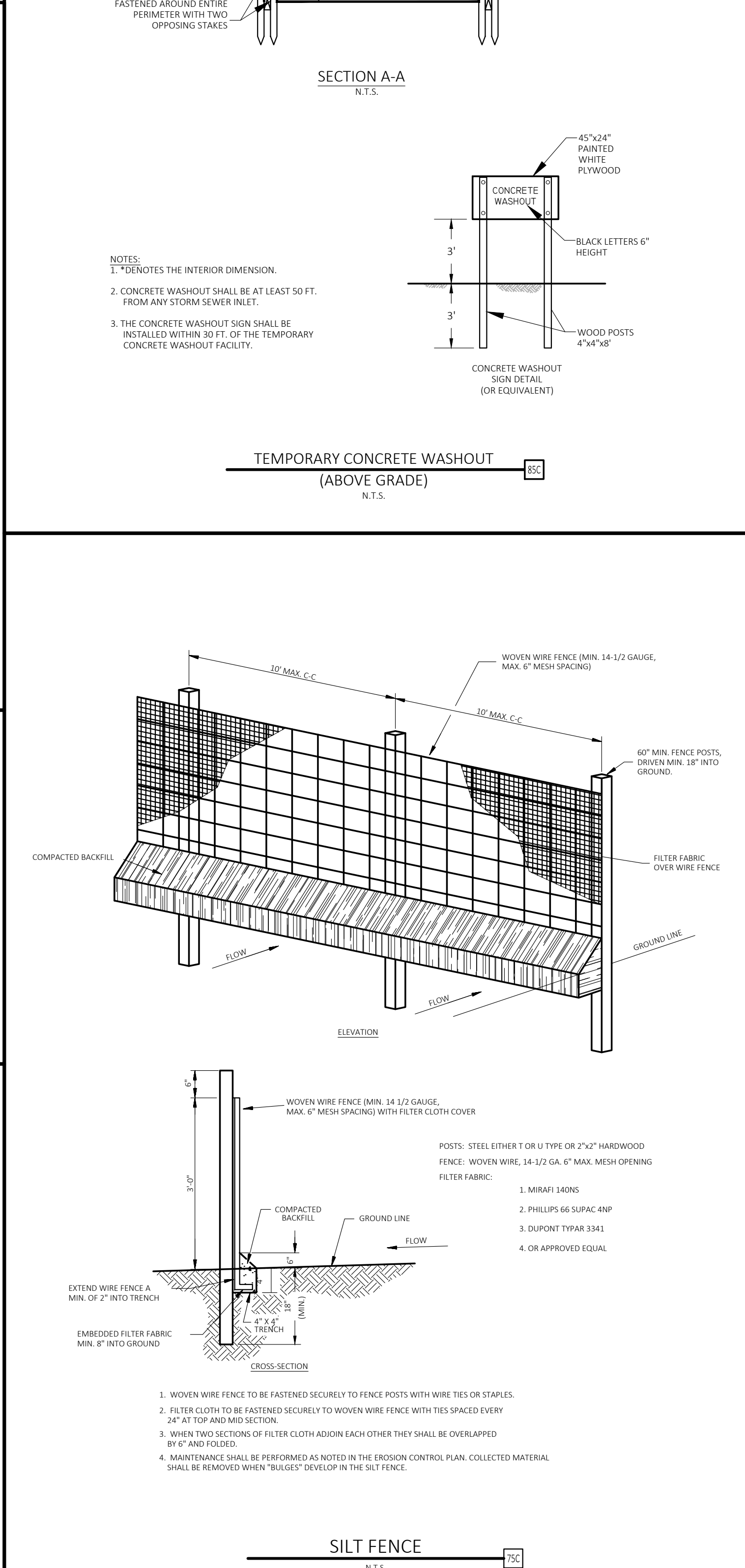
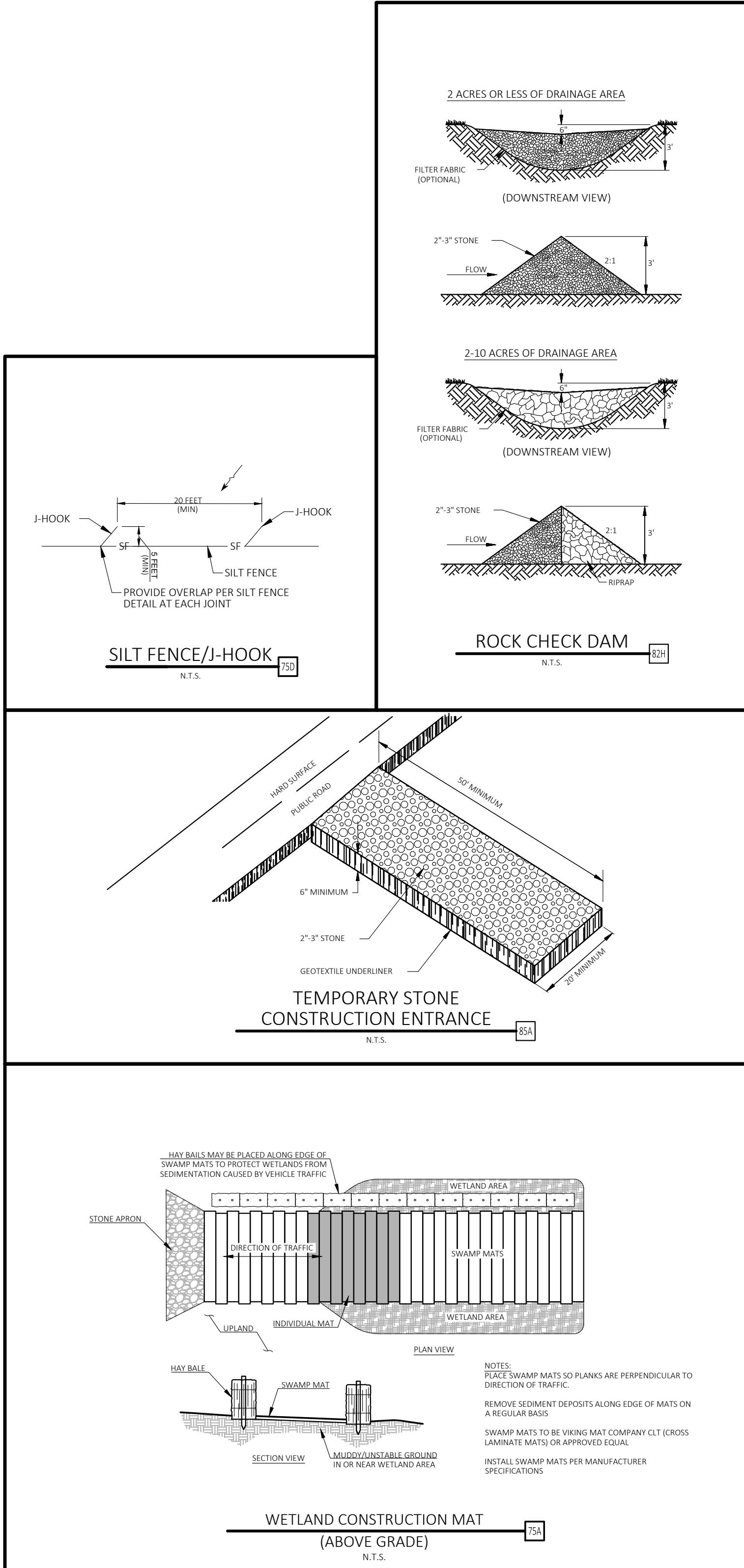
NOTE: DOWNSLOPE PROTECTIVE MEASURES MUST ALWAYS BE IN PLACE BEFORE SOIL IS DISTURBED. CONSTRUCTION STEPS CAN BE IMPLEMENTED CONCURRENTLY ONLY IF ASSOCIATED DOWNSLOPE PROTECTIVE MEASURES HAVE BEEN INSTALLED FOR EACH ACTIVITY.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
2. PREPARE TEMPORARY PARKING AND STORAGE AREA.
3. CONSTRUCT THE SILT FENCES ON THE SITE.
4. INSTALL ROCK CHECK DAMS
5. CLEAR AND GRUB THE SITE.
6. BEGIN GRADING THE SITE.
7. TEMPORARILY SEED DEWEDED AREAS.
8. PREPARE SITE GEOPAVE GRAVEL ROAD.
9. INSTALL RIBBON CURBS
10. PREPARE SITE FOR PAVING.
11. PAVE SITE.
12. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.
13. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED).

GENERAL EROSION NOTES CONT'D

MAINTENANCE
ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A RAINFALL EVENT GREATER THAN 1-INCH, AND SHOULD BE CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.
2. SILT FENCES AND WATTLES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES AND WATTLES WHEN IT REACHES ONE-THIRD TO ONE-HALF THE HEIGHT OF THE BMP.
3. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
4. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
5. IF THE STONES IN THE GRAVEL INLET SEDIMENT FILTERS OR ROCK CHECK DAMS BECOME CLOGGED WITH SEDIMENT, THE STONES MUST BE PULLED AWAY, CLEANED AND REPLACED.
6. DIVERSION DIKES AND/OR DITCHES SHALL BE CHECKED REGULARLY FOR EROSION AND SCOUR. ANY ERODED AREAS FOUND MUST BE IMMEDIATELY REPAIRED.
7. CONCRETE WASHOUT AREAS SHALL BE CHECKED REGULARLY FOR LEAKS AND CAPACITY. ALL LEAKS MUST BE REPAIRED IMMEDIATELY. WHEN THE WASHOUT VOLUME HAS BEEN REDUCED BY 85%, THE BMP MUST BE REMOVED AND REPLACED.





CEI
Solutions for
Land and Life

CEI ENGINEERING ASSOCIATES, INC.
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737
FAX: ---

LLELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



STATE OF TEXAS
CHRISTOPHER J. WALL
140722
LICENSED PROFESSIONAL ENGINEER
4-27-2026

PROFESSIONAL OF RECORD KAP
PROJECT MANAGER MCR
DESIGNER WCM
CEI PROJECT NUMBER 33855
DATE 4/27/2026
REVISION REV-1

EROSION CONTROL
NOTES & DETAILS
SHEET TITLE
SHEET NUMBER

C6.1

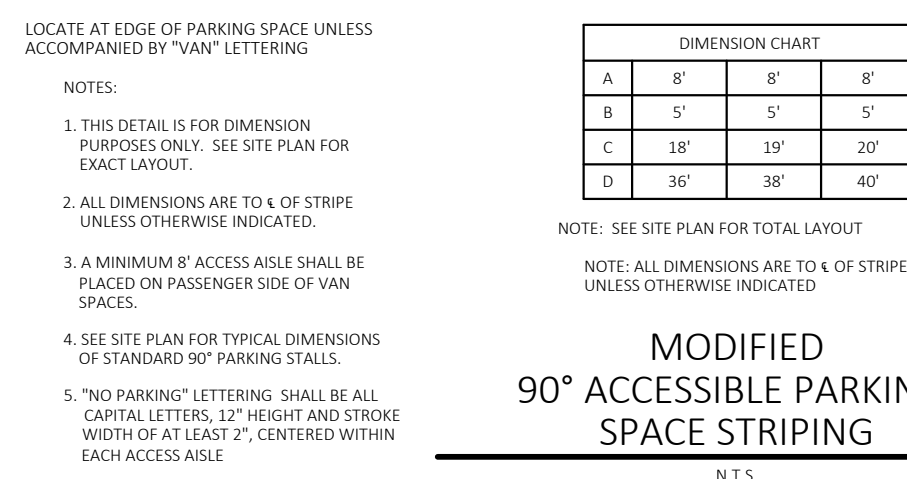
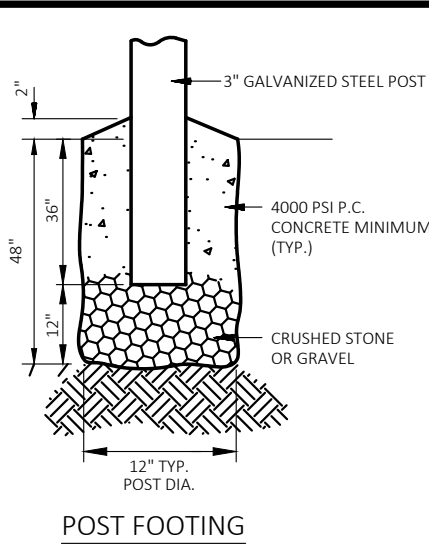
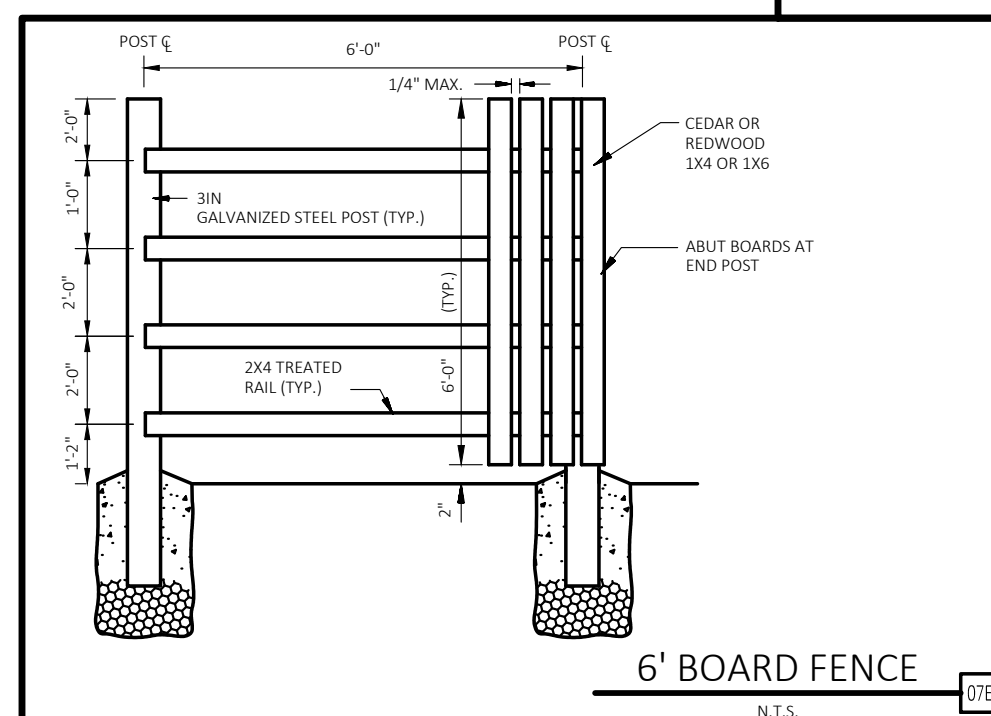
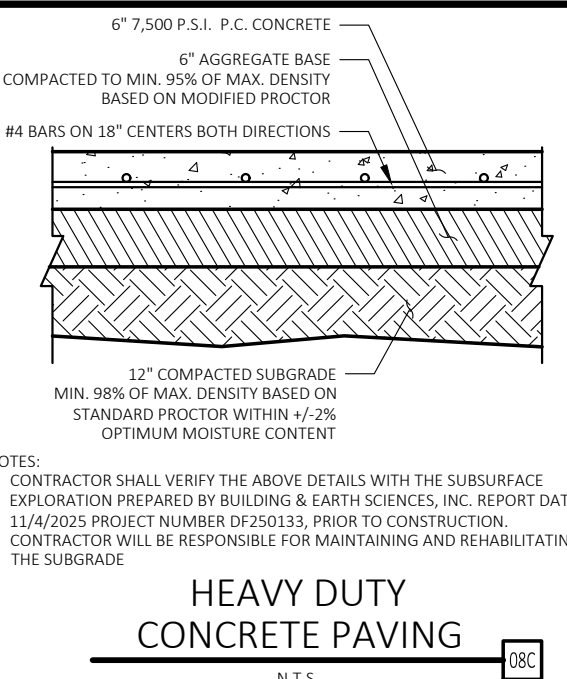
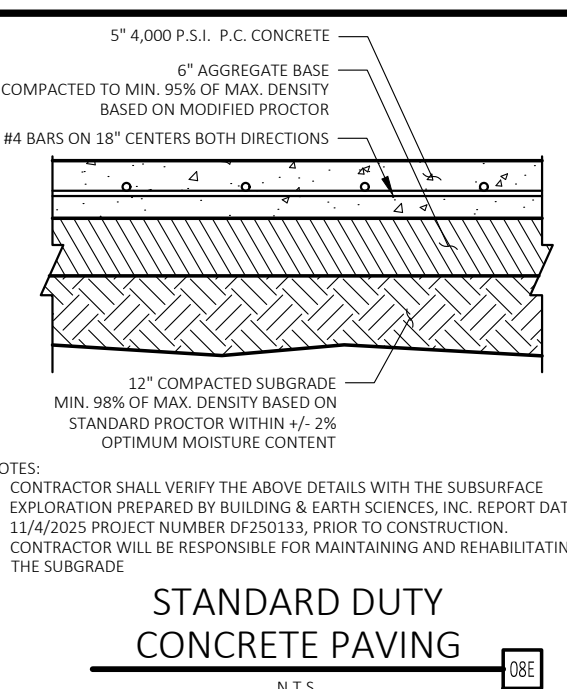
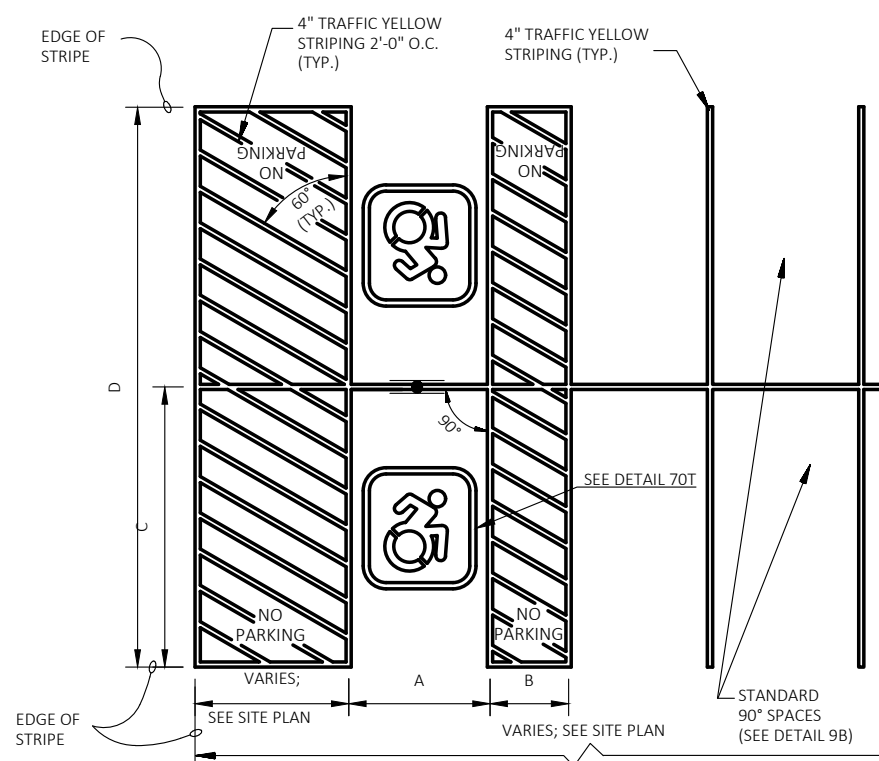
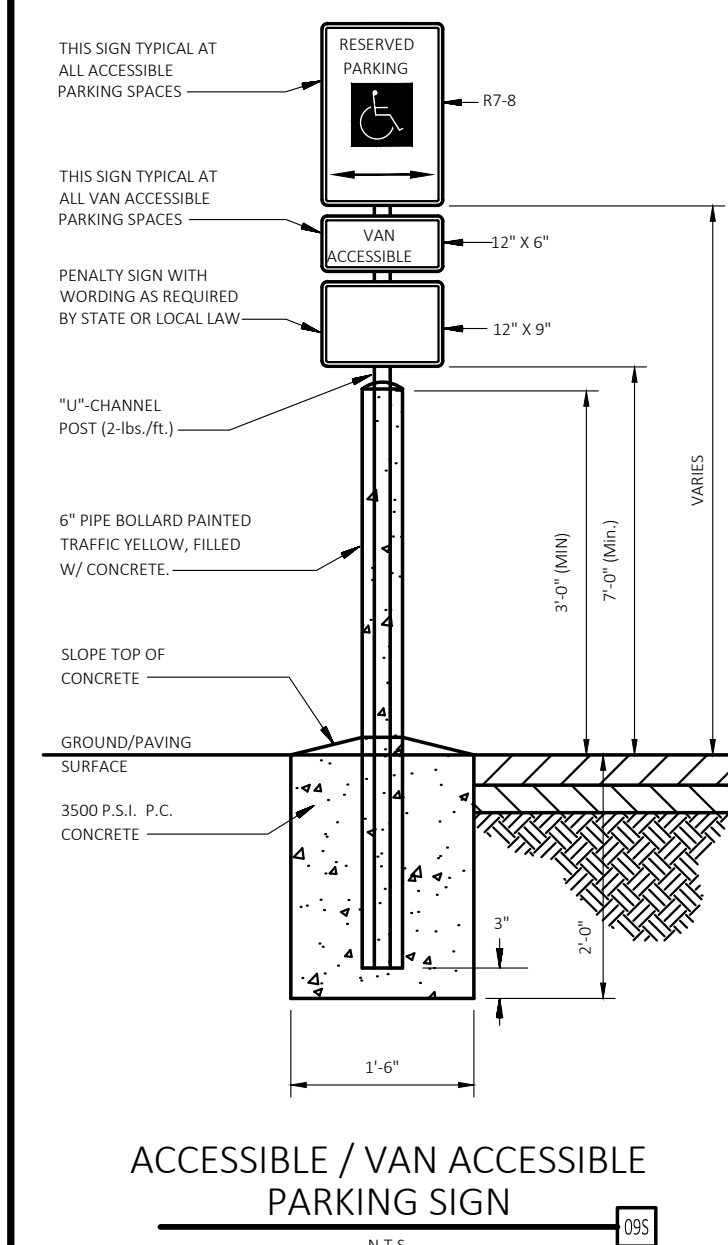
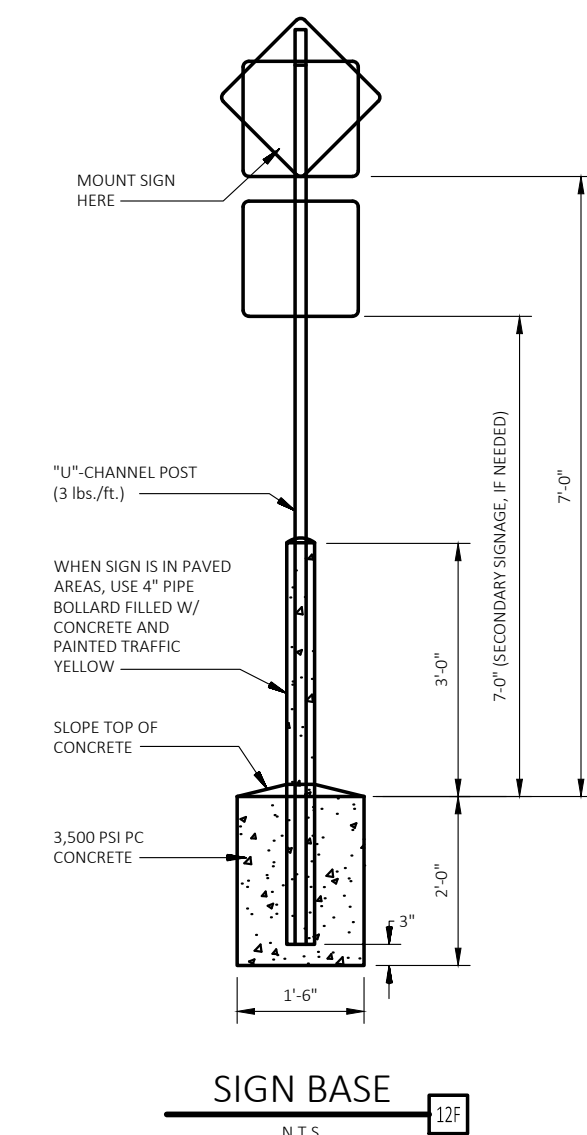
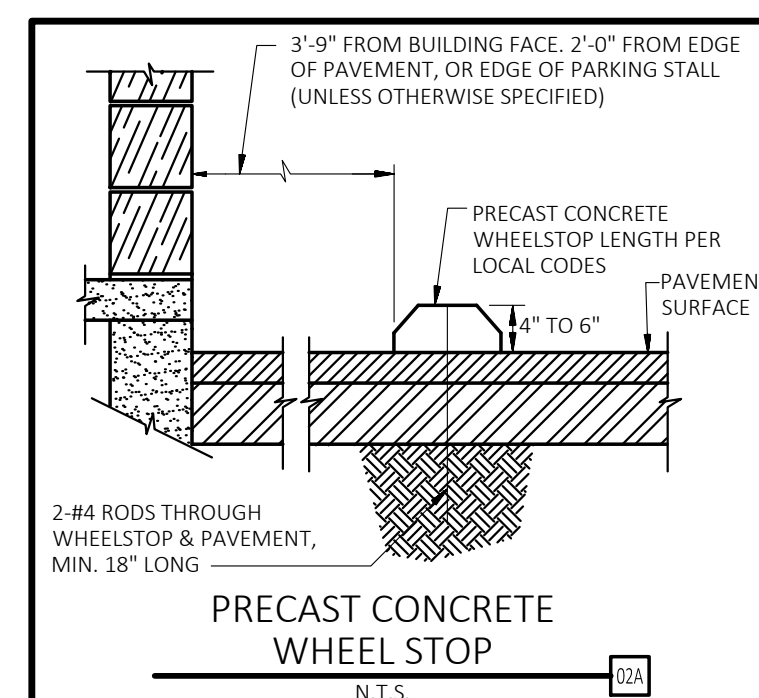
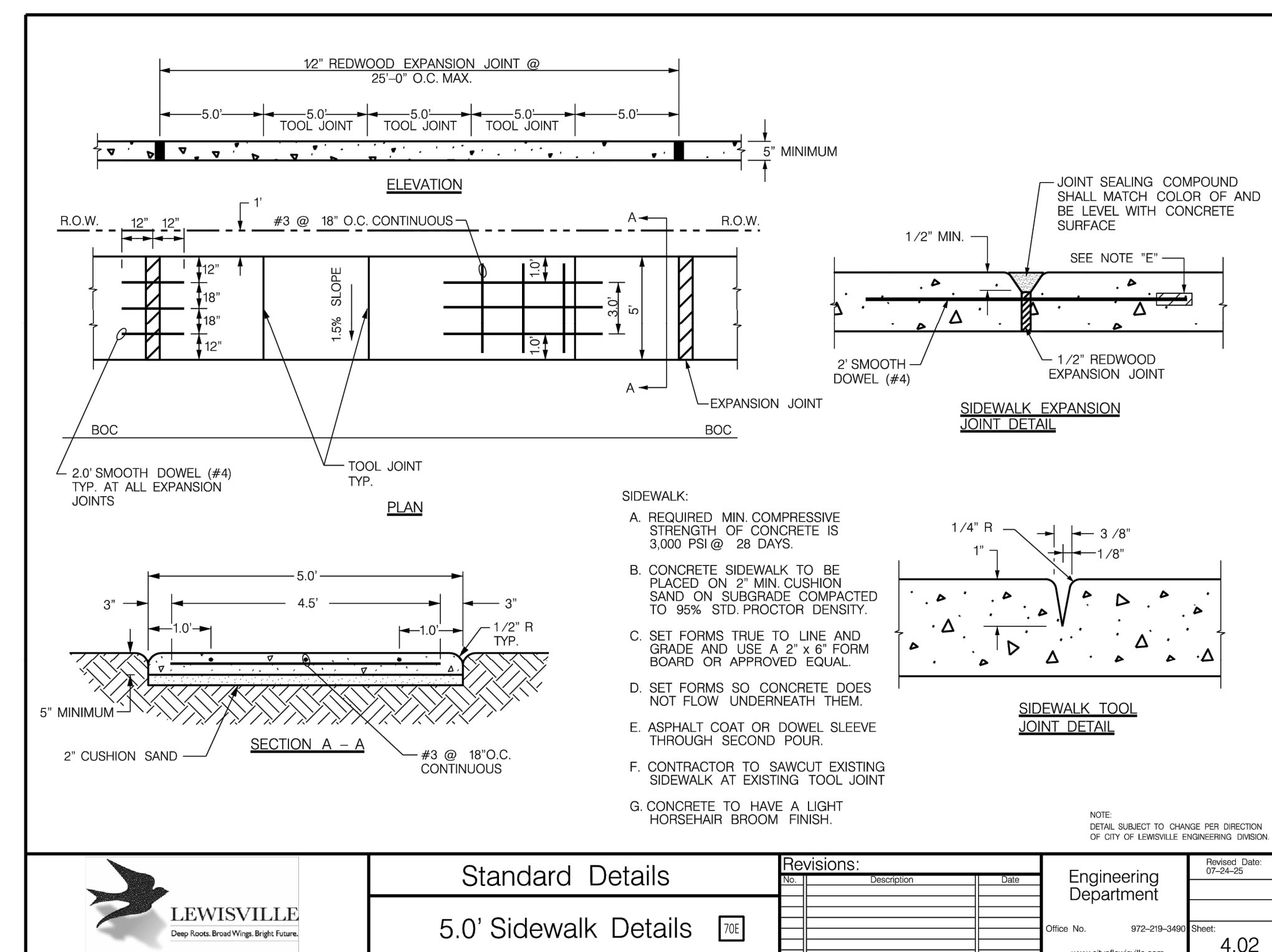


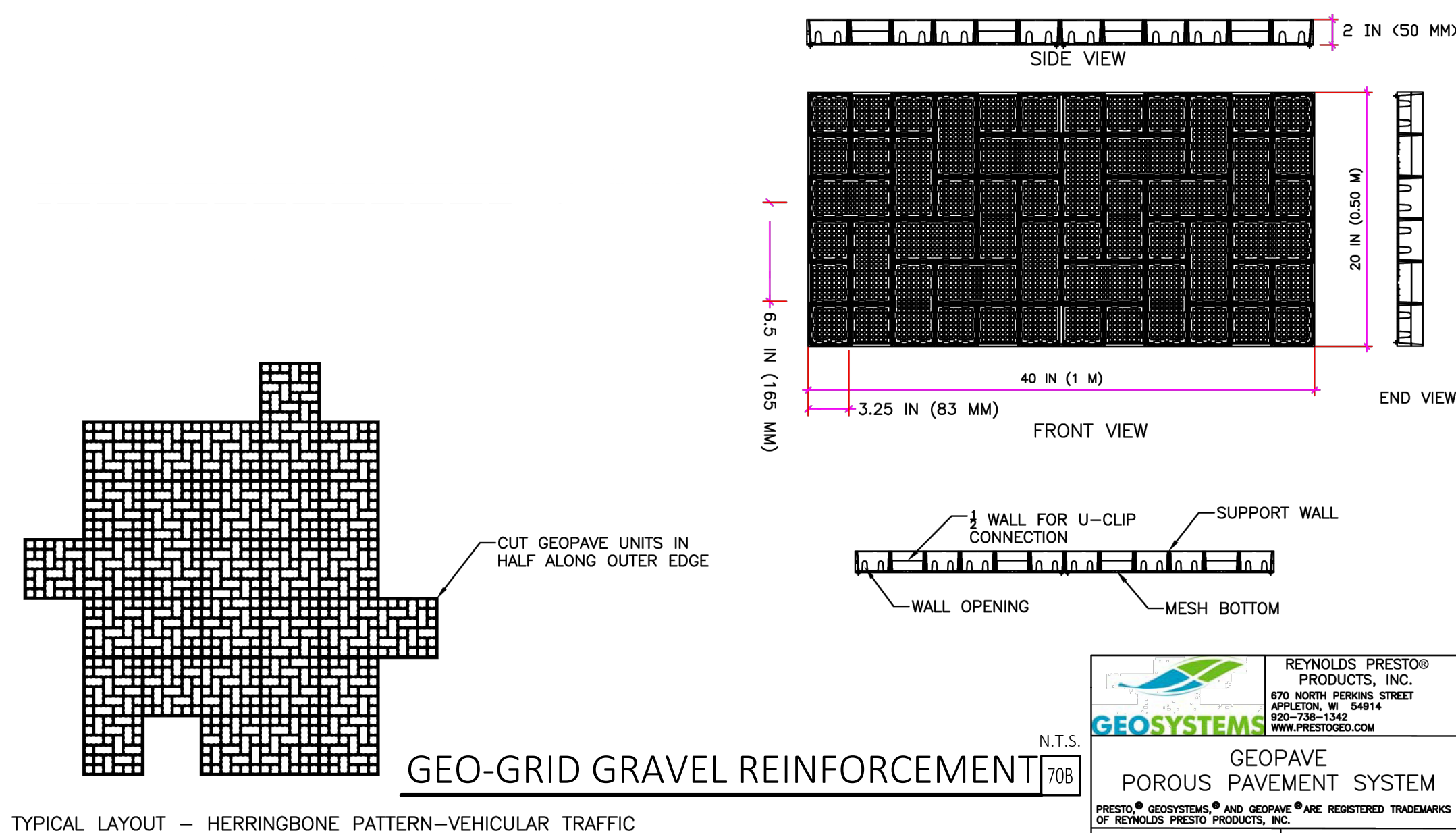
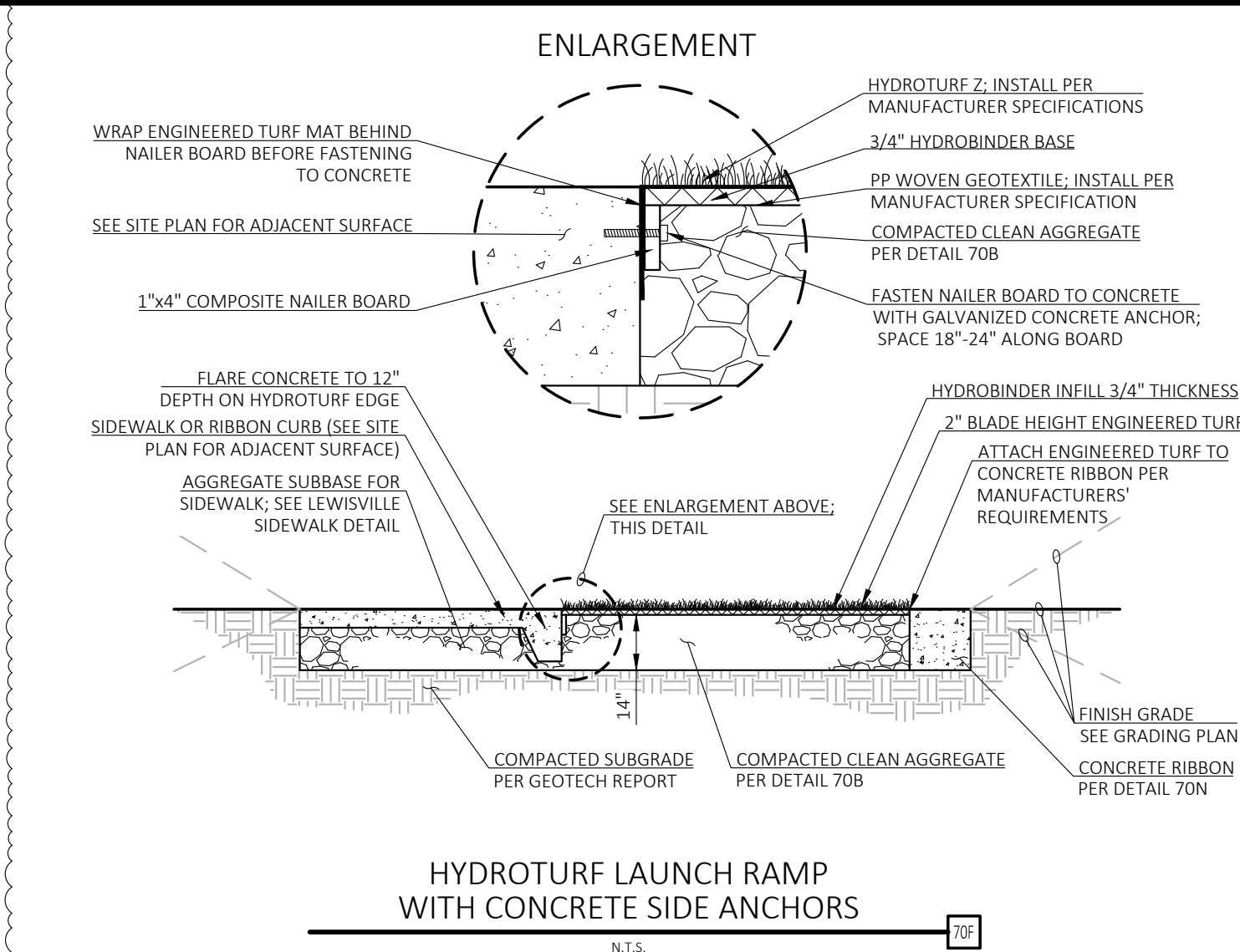
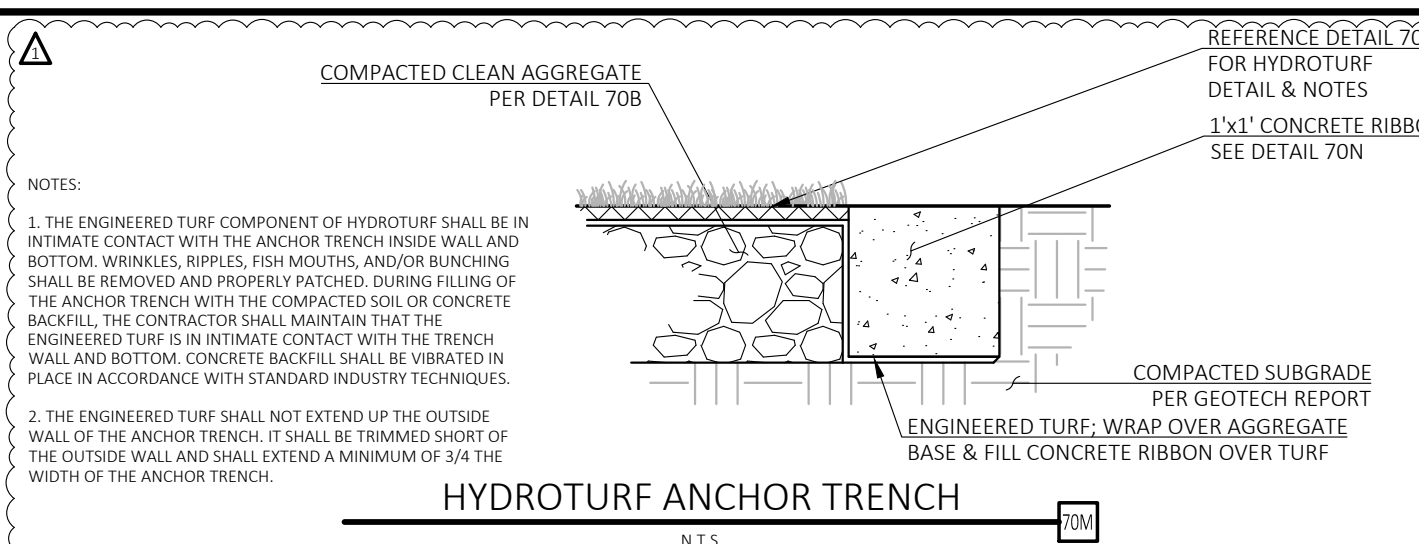
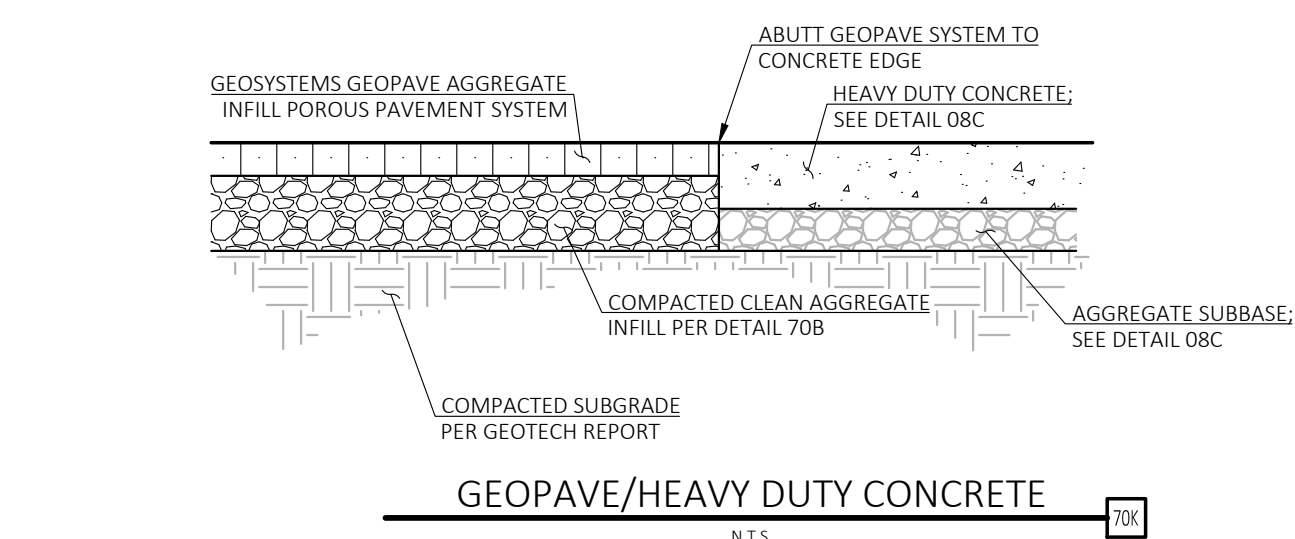
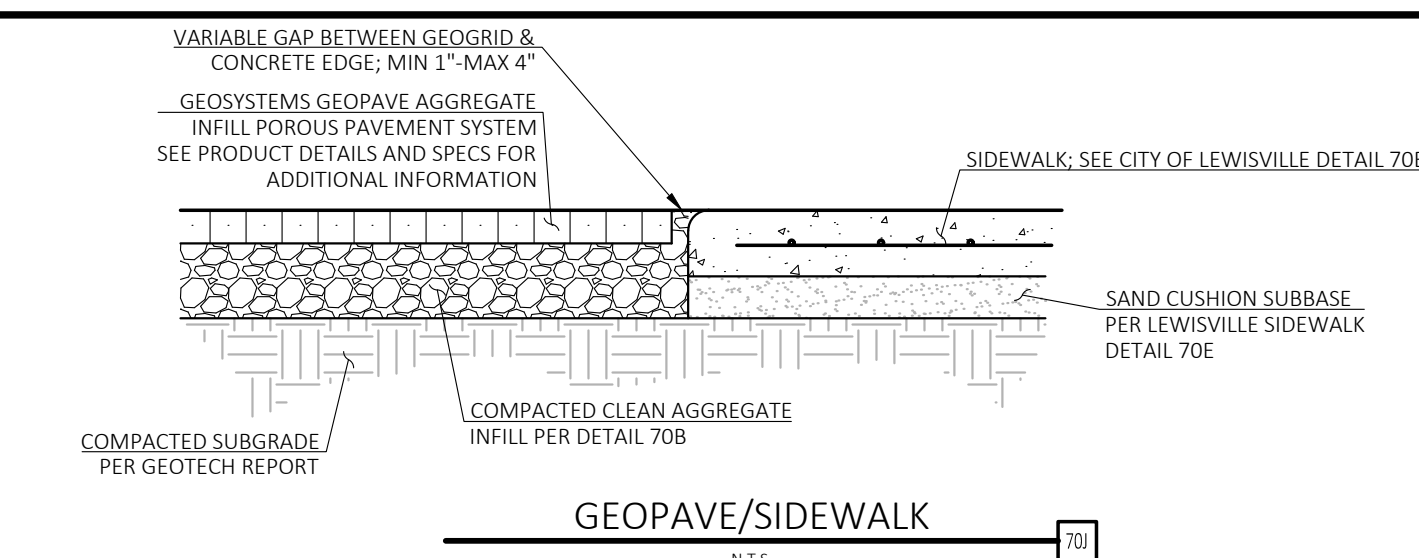
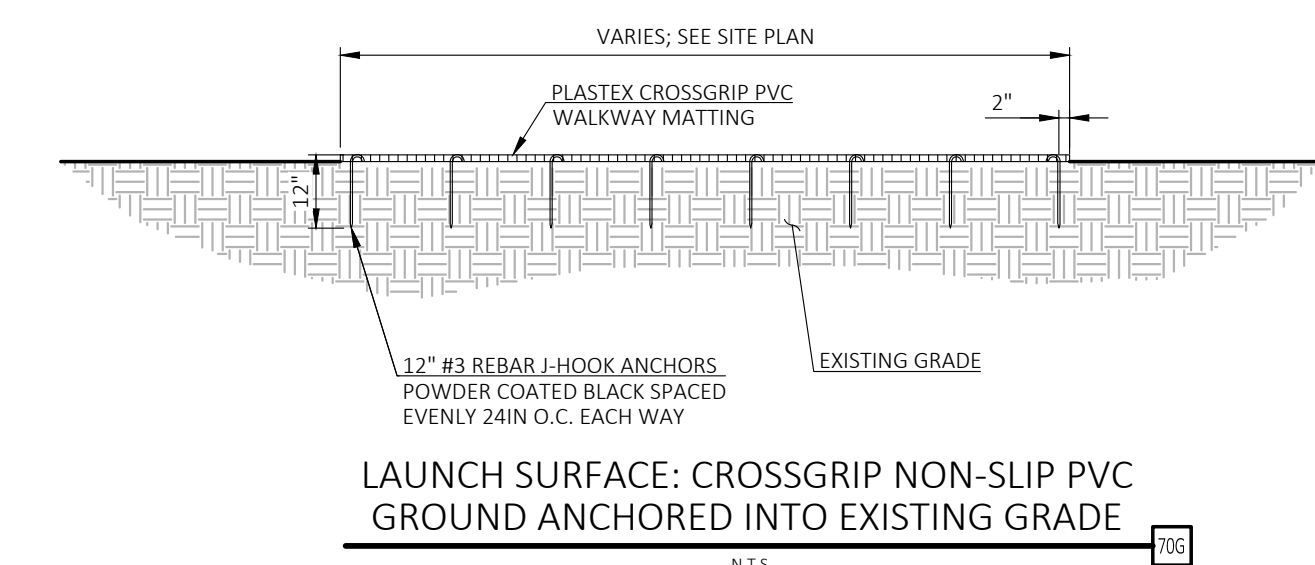
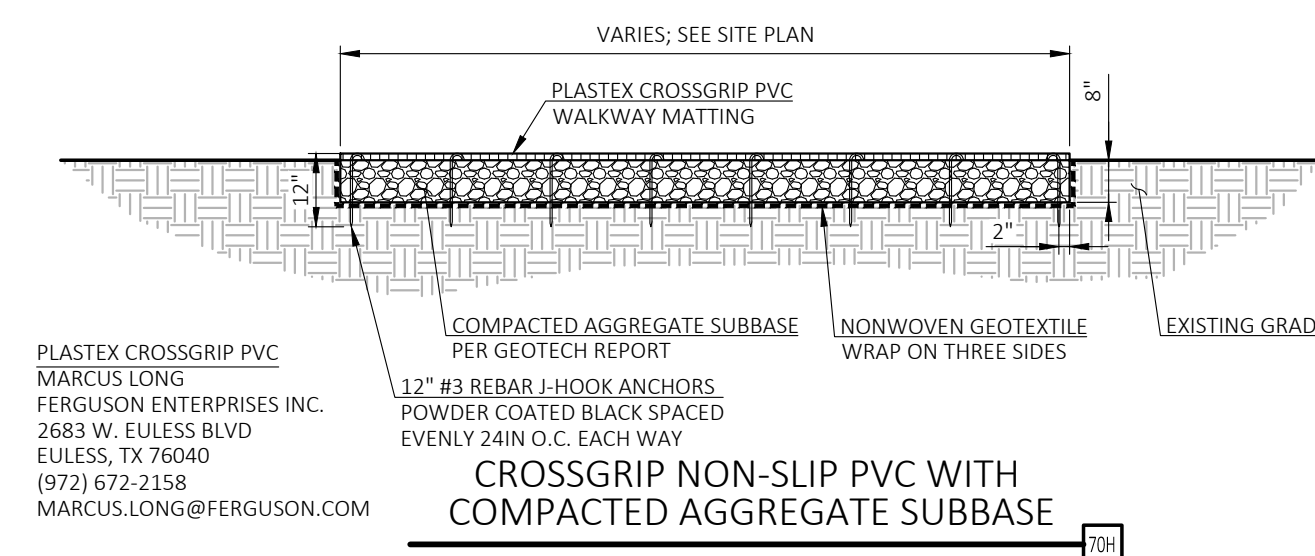
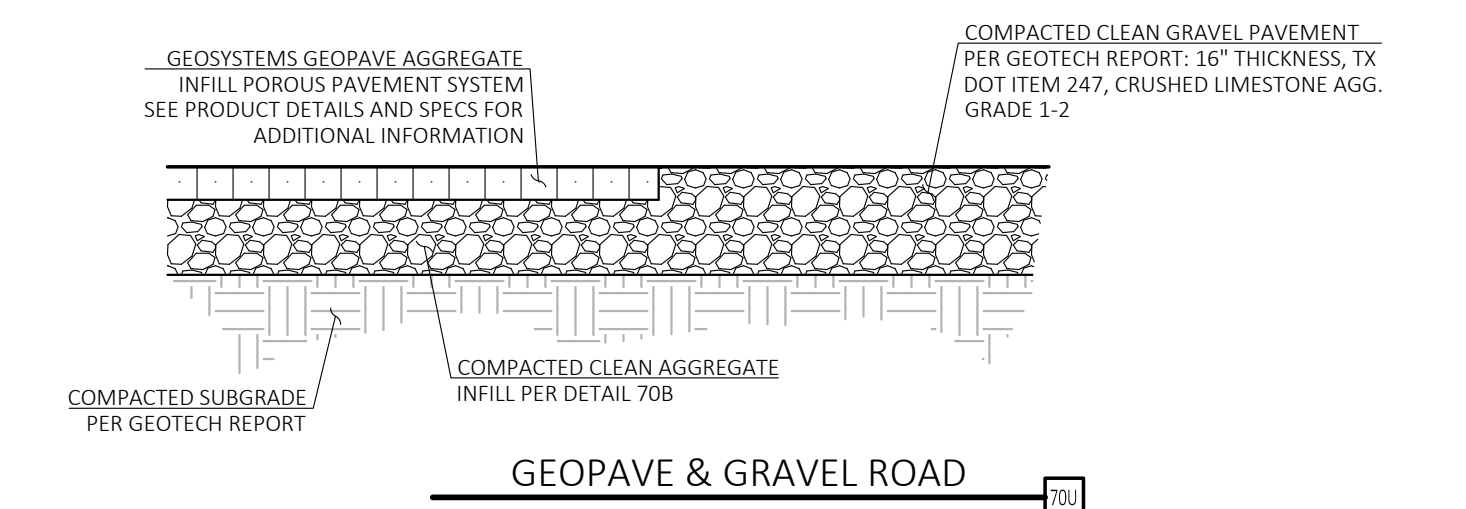
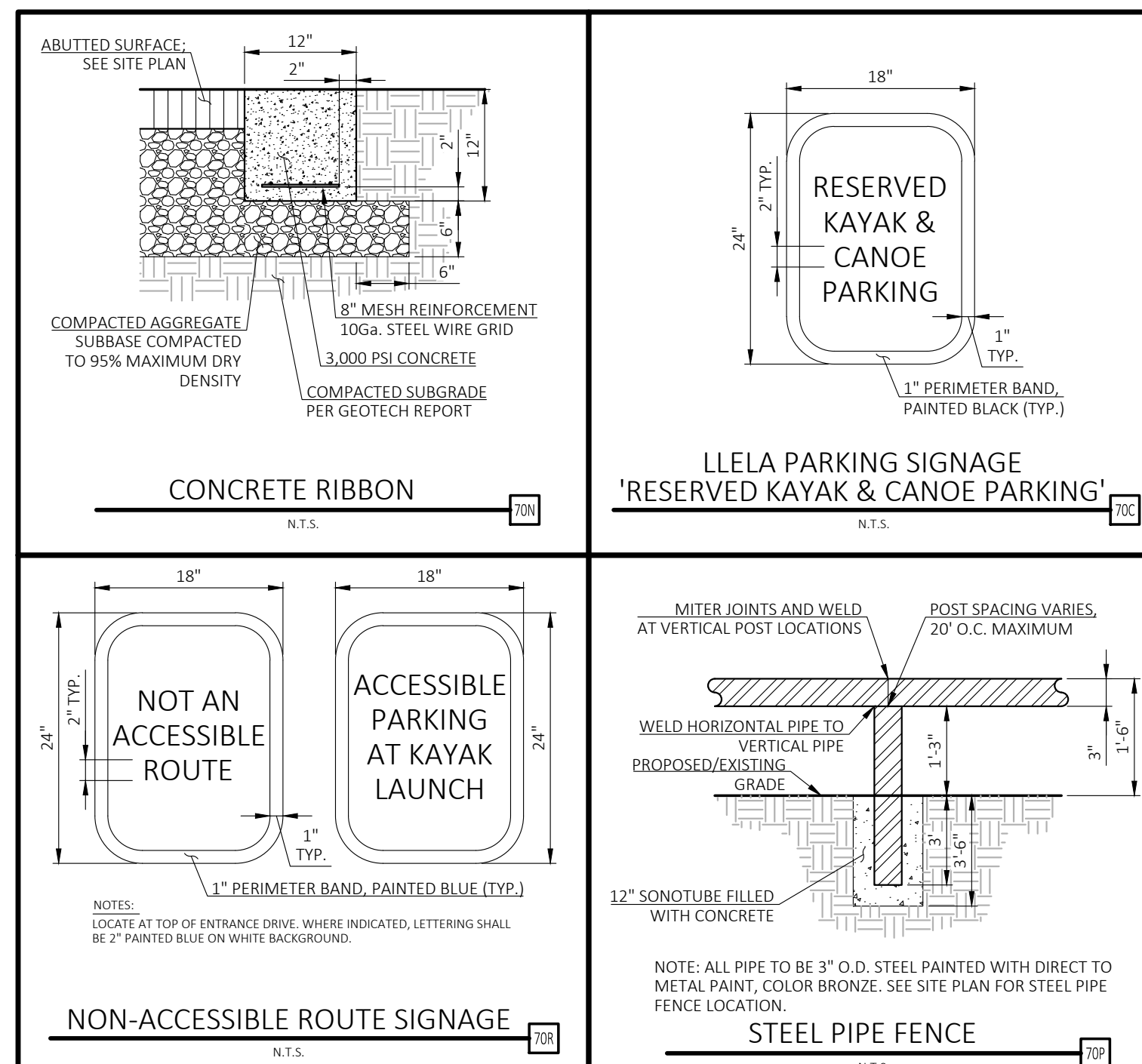
PROFESSIONAL OF RECORD	KAR
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

DETAIL SHEET 1

SHEET TITLE
SHEET NUMBER

C7.0

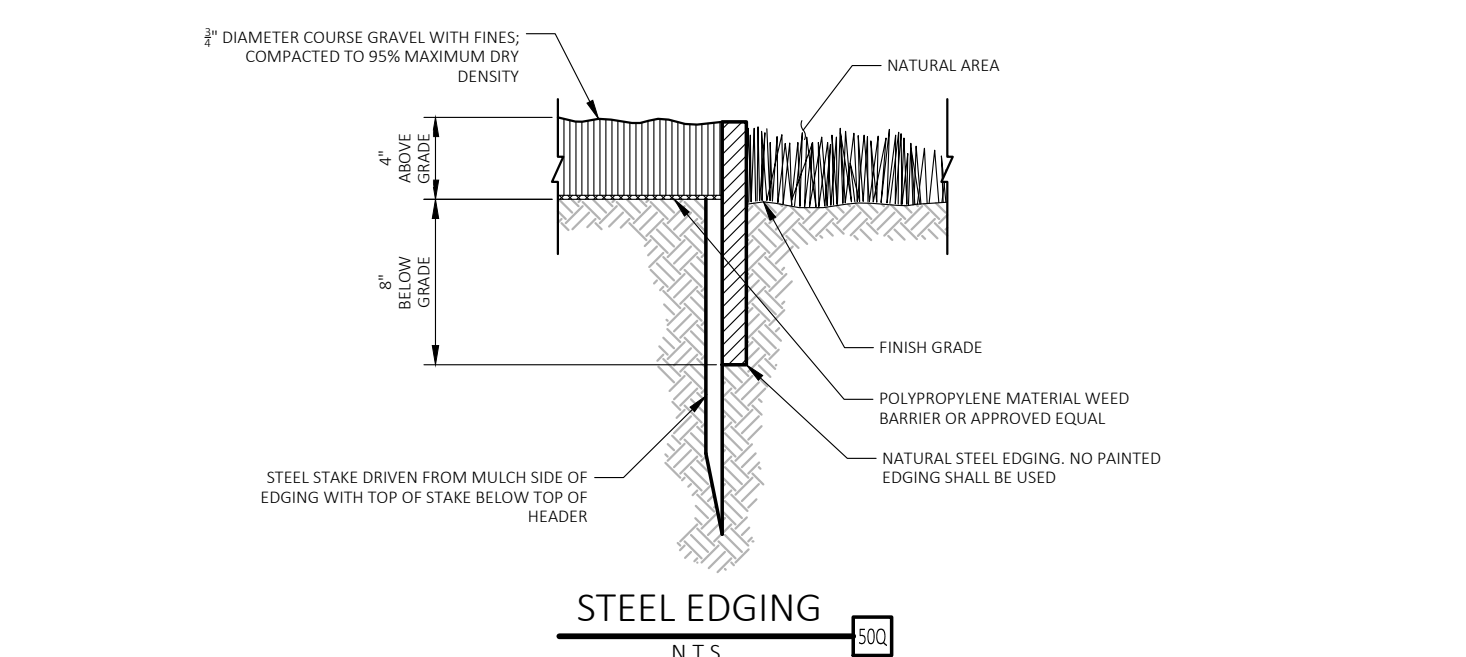
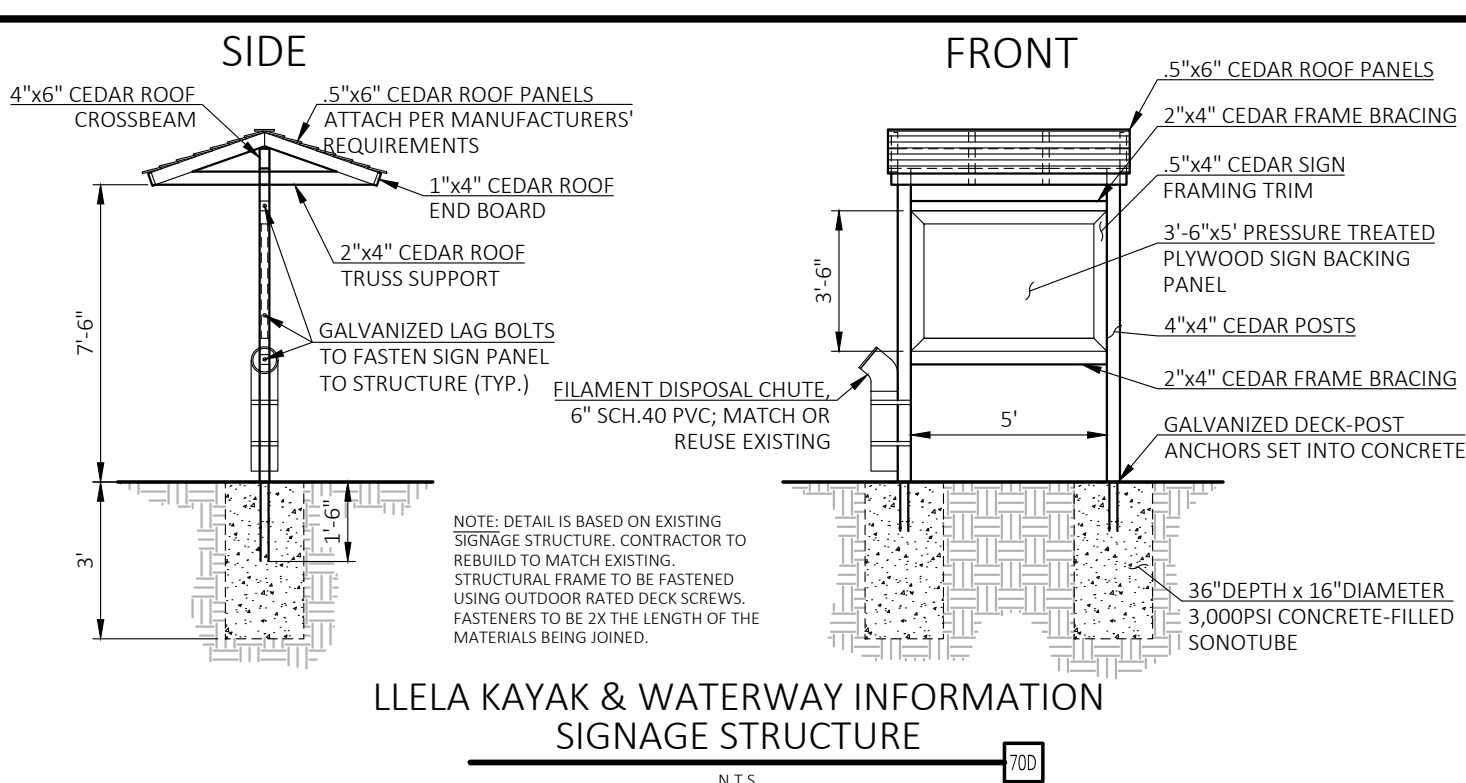
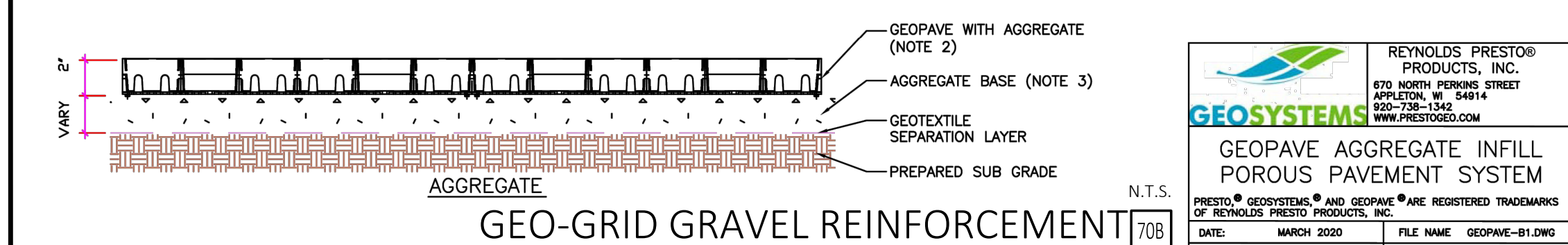




DESIGN GUIDELINES — BASE DEPTH			SCALE:	SHEET	Y
LOAD DESCRIPTION	CBR 2 - 4%	CBR > 4%	GEOPAVE MATERIAL SPECIFICATION		
			UP TO 100% RECYCLED POLYETHYLENE		
Heavy Fire Truck Access & H/HS20 loading. Typical 110 psi (758 kPa) tire pressure. Single axle loadings of 32 kips (145 kN). Gross vehicle weight of 80,000 (lbs) (36.3 MT).	6 IN (150 MM)	6 IN (150 MM)	COLOR	RANGES DARK SHADES GRAY TO BLACK	
			CHEMICAL RESISTANCE	SUPERIOR	
			CARBON BLACK FOR UV STABILIZATION, %	1.5 TO 2.0%	
			UNIT MIN CRUSH STRENGTH — EMPTY @ 70F (21C)	175 PSI (1,202 KPa)	
			UNIT MIN CRUSH STRENGTH — FILLED @ 70F (21C)	5,160 PSI (35,623KPa)	
			FLEXURAL MODULUS @ 70F (21C)	35,000 PSI (240,000 KPa)	
			NOMINAL DIMENSIONS — WIDTH X LENGTH	20 X 40 IN (0.5 X 1.0 M)	
			NOMINAL UNIT DEPTH	2.0 IN (50 MM)	
			NOMINAL AREA	5.38 SQFT (0.5 SQMTR)	
			CELLS PER UNIT	50	
			SMALL CELL SIZE	3.25 X 3.25 IN (83 X 83 MM)	
			LARGE CELL SIZE	3.25 X 6.5 IN (83 X 165 MM)	
			TOP OPEN AREA PER UNIT	90.5%	
			BOTTOM OPEN AREA PER UNIT	32.6%	
			BOTTOM MESH OPENING SIZE	0.25 X 0.25 IN (6.35 X 6.35 MM)	
NOMINAL WEIGHT PER UNIT	7.6 LBS (3.4 KG)				
RUNOFF COEFFICIENT @ 2.5 IN/HR (64 MM)	0 — 0.15				
RAINFALL WITH AGGREGATE INFILL					
NOTES, PER PAVLIT	46				

Notes:

1. This information is based on the use of GeoPave manufactured by Reynolds Presto Products, Inc. All rights reserved. Any use of this information for any rigid porous paver product other than that manufactured by Reynolds Presto Products, Inc. is strictly prohibited and makes this information invalid.
2. Aggregate infiltration shall be 0.375 to 0.5 inches (10 to 13 mm) open graded crushed aggregate with fine content less than 5% to allow for free drainage.
3. Aggregate base shall be 0.375 to 1.0 inch (10 to 25 mm) open graded crushed aggregate with fine content less than 5% to allow for free drainage.
4. A minimum 2 inch (50 mm) of aggregate base should be placed below the units to act as drainage layer and infiltration area. The Engineer of Record shall be responsible for the design and stability of the open graded base course.
5. Provide a non-woven geotextile separation layer and install in accordance with Manufacturer recommendations including overlaps based on sub grade CBR.
6. Connect adjacent inlets with the U-CLIP connection at all half wall locations, and driven connections so that adjacent sections have horizontally level profiles.
7. Refer to the GeoPave Design and Construction Overview for a complete description of the design and construction methods.



CEI ENGINEERING ASSOCIATES, INC
3030 LYNDON B JOHNSON FWY #920
DALLAS, TX 75234
PHONE: (972) 488-3737

REVISION		
NO.	DESCRIPTION	DATE
1	REV-1	04/27/2026

LELELA KAYAK LAUNCH
LEWISVILLE LAKE
LEWISVILLE LAKE SPILLWAY, E JONES ST
LEWISVILLE, TX 75057



PROFESSIONAL OF RECORD	KAR
PROJECT MANAGER	MCR
DESIGNER	WCM
CEI PROJECT NUMBER	33855
DATE	4/27/2026
REVISION	REV-1

DETAIL SHEET 2

SHEET TITLE
SHEET NUMBER

C7.1