

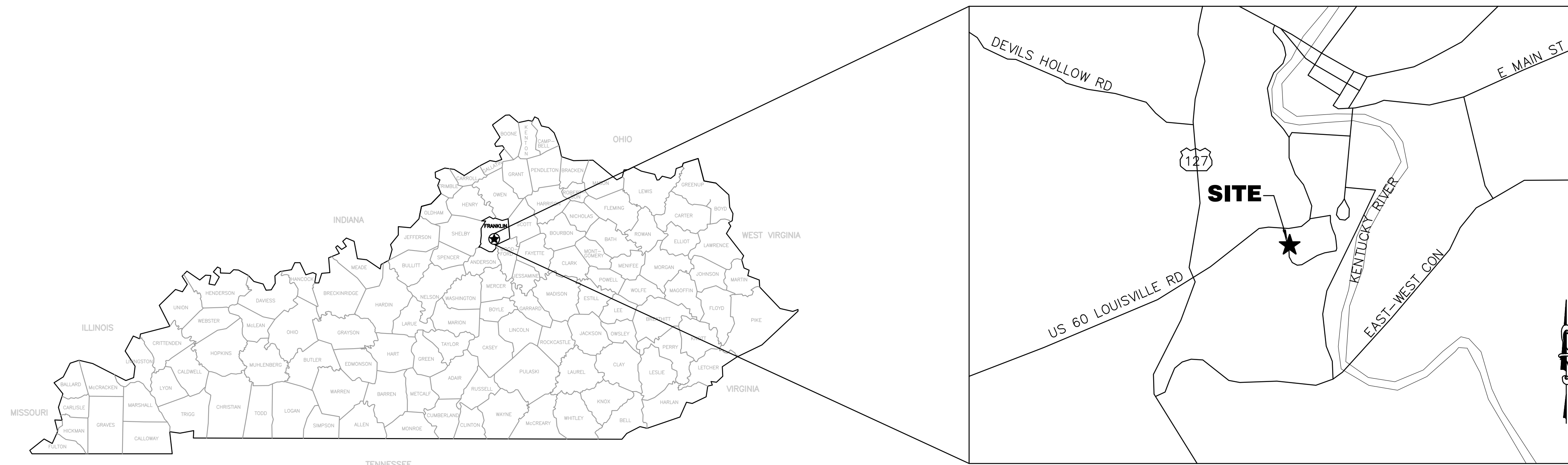
WATER STORAGE IMPROVEMENT PROJECT

BID INVITATION NO. _____

FRANKFORT ELECTRIC AND WATER PLANT BOARD

FRANKFORT, KENTUCKY

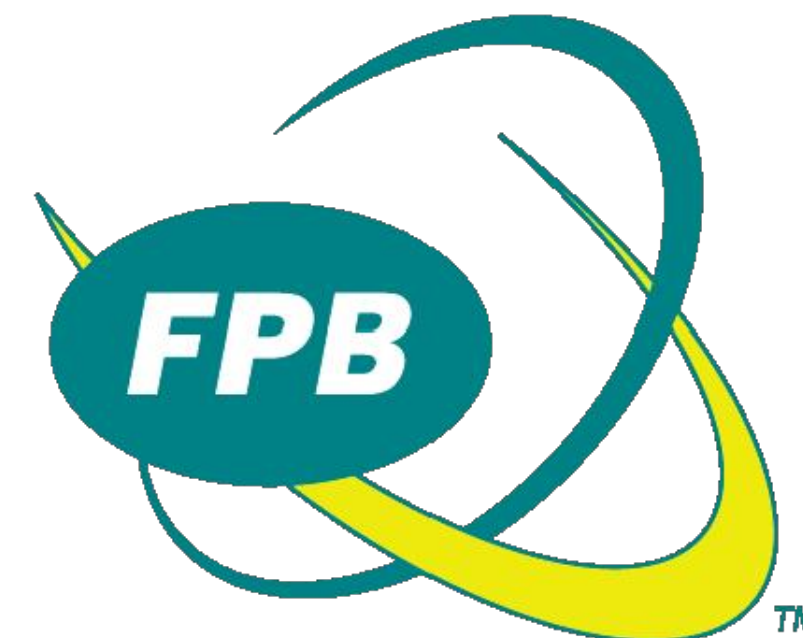
FEBRUARY, 2020



KENTUCKY STATE MAP

VICINITY MAP
NOT TO SCALE

**651 PERIMETER DRIVE, SUITE 220
LEXINGTON, KY 40517
859-225-8500
859 225-8501 FAX
WWW.STRAND.COM**

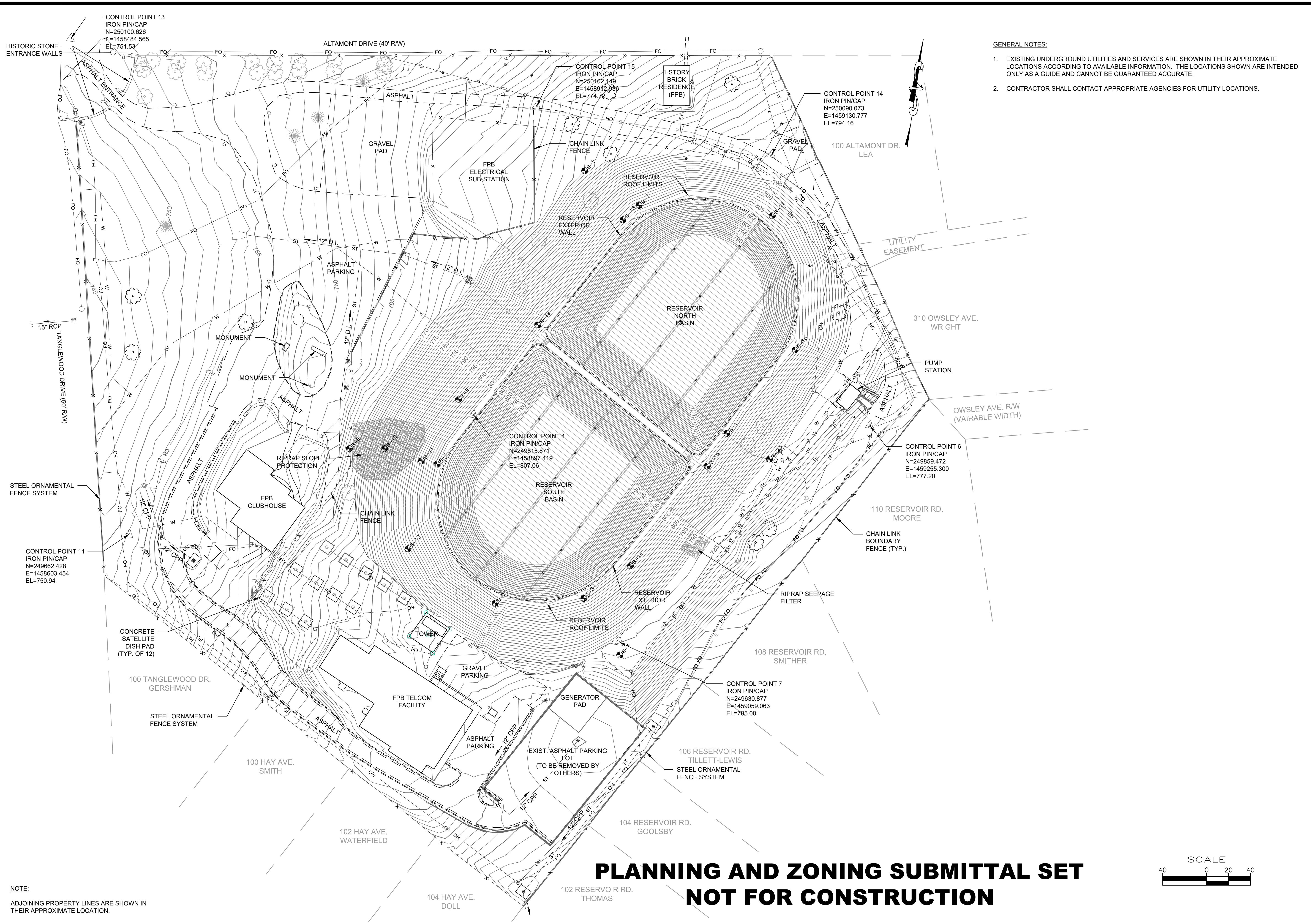


**PLANNING AND ZONING SUBMITTAL SET
NOT FOR CONSTRUCTION**



**SHEET
1
2012.004**

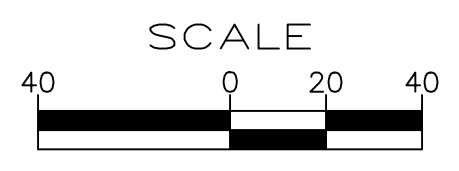
CONTRACT NO. 1-2020



- GENERAL NOTES:**
- EXISTING UNDERGROUND UTILITIES AND SERVICES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ACCORDING TO AVAILABLE INFORMATION. THE LOCATIONS SHOWN ARE INTENDED ONLY AS A GUIDE AND CANNOT BE GUARANTEED ACCURATE.
 - CONTRACTOR SHALL CONTACT APPROPRIATE AGENCIES FOR UTILITY LOCATIONS.

NOTE:
ADJOINING PROPERTY LINES ARE SHOWN IN THEIR APPROXIMATE LOCATION.

**PLANNING AND ZONING SUBMITTAL SET
NOT FOR CONSTRUCTION**



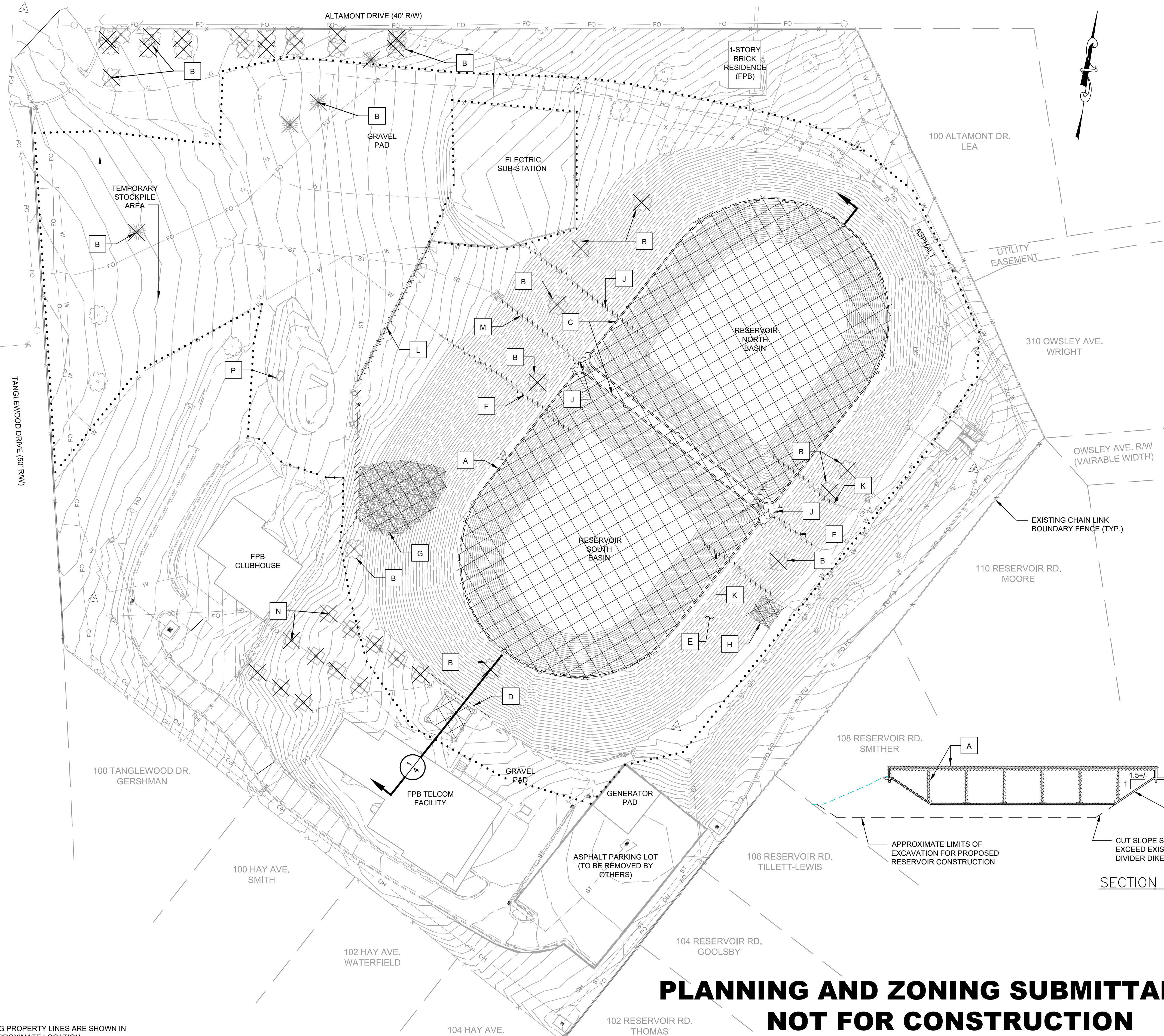
NO.	REVISIONS	DATE:

**PHASE 1 CONSTRUCTION
EXISTING SITE PLAN**
WATER STORAGE IMPROVEMENT PROJECT
FRANKFORT ELECTRIC AND WATER PLANT BOARD
FRANKFORT, KENTUCKY

JOB NO.
2012.004
PROJECT MGR.
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2

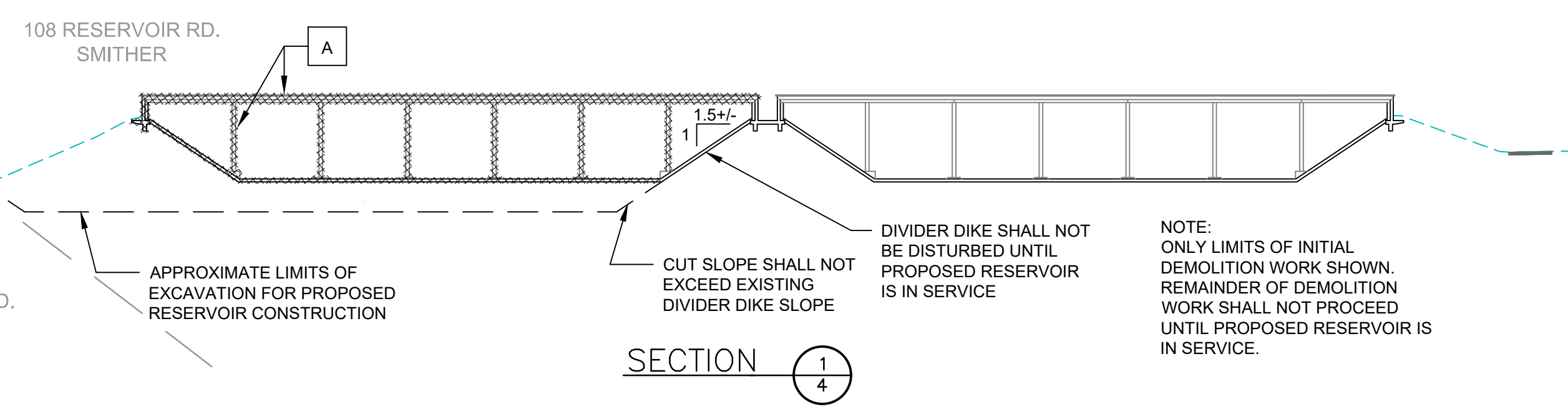


DEMOLITION NOTES

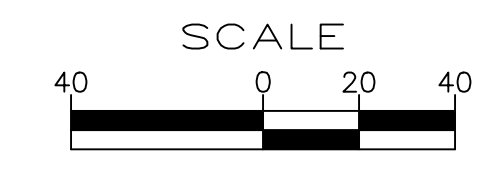
- A REMOVE SOUTH BASIN ROOFING, PRECAST DOUBLE TEE ROOF PLANKS, PRECAST ROOF SUPPORT BEAMS, PRECAST COLUMNS, CONCRETE RING WALL, AND GUNITE SIDE SLOPES. DO NOT REMOVE CONCRETE RING WALL WITHIN THE LIMITS OF DIVIDER DIKE UNTIL PROPOSED RESERVOIR IS IN SERVICE.
- B REMOVE TREES, SHRUBS AND OTHER PLANT LIFE AS REQUIRED FOR CONSTRUCTION ACCESS AND SITE GRADING OR FINAL LANDSCAPE PLAN.
- C REMOVE NORTH BASIN ROOFING, PRECAST DOUBLE TEE ROOF PLANKS, PRECAST ROOF SUPPORT BEAMS, PRECAST COLUMNS, CONCRETE RING WALL, GUNITE LINED SIDE SLOPES LINER, AND REMAINDER OF SOUTH BASIN.
- D EXISTING TOWER AND ALL APPURTENANCES TO BE REMOVED BY OTHERS.
- E LIMIT EASTERN BERM EXCAVATION TO THE MINIMUM EXTENTS POSSIBLE. SURFACE WATER DRAINAGE DURING CONSTRUCTION SHALL BE DIRECTED TOWARD THE WEST AWAY FROM THE ADJACENT NEIGHBORHOOD. NO STOCK PILING OF MATERIALS WILL BE PERMITTED BETWEEN THE EXISTING RESERVOIR AND THE RESIDENTIAL NEIGHBORHOOD.
- F REMOVE BURIED PIPING AS NECESSARY TO ACCOMMODATE NEW CONSTRUCTION
- G REMOVE REMEDIAL SLOPE PROTECTION AND FILTER FABRIC.
- H REMOVE SEEPAGE FILTER AND ASSOCIATED PIPING.
- J PLUG AND ABANDON IN PLACE. OWNER WILL PLUG PIPE AT EXISTING BUTTERFLY VALVE.
- K PLUG EXISTING 14" DRAIN PIPE WITH CONCRETE AND ABANDON IN PLACE.
- L REMOVE EXISTING CHAIN LINK FENCE AS NEEDED. CONTRACTOR TO PROTECT EXISTING MAINTENANCE CURB DURING DEMOLITION AND CONSTRUCTION. DISTURBED CURB TO BE REPAIRED/REPLACED TO ORIGINAL CONDITION.
- M PLUG EXISTING PIPE AT CATCH BASIN WITH CONCRETE AND REMOVE PIPE AS NECESSARY TO ACCOMMODATE NEW CONSTRUCTION.
- N EXISTING SATELLITE DISH, FOUNDATION, AND ALL APPURTENANCES TO BE REMOVED BY OTHERS. (TYP. OF 12)
- P EXISTING STEAM WHEEL, PISTON, AND MARKER TO BE RELOCATED BY OWNER. REMOVE ISLAND.

GENERAL NOTES:

1. DRAWINGS DO NOT NECESSARILY CALL OUT ALL ITEMS REQUIRING DEMOLITION, REMOVAL, OR PATCHING. WHERE NOT SHOWN, DEMOLITION, REMOVAL, CUTTING, PATCHING, AND OTHER WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION SHOWN SHALL BE PROVIDED AS PART OF THE CONTRACT.
2. REFER TO CONSTRUCTION SEQUENCE IN DIVISION 1 SPECIFICATIONS FOR GENERAL SEQUENCE OF WORK.
3. NO EXCAVATION OR DEMOLITION WILL BE PERMITTED WITHIN THE LIMITS OF THE EXISTING DIVIDER DIKE UNTIL PROPOSED RESERVOIR IS PLACED IN SUCCESSFUL OPERATION.
4. CONTRACTOR SHALL MAINTAIN OWNER ACCESS TO ALL EXISTING FACILITIES ON SITE AT ALL TIMES UNLESS APPROVED BY OWNER IN WRITING. ELECTRICAL SUBSTATION SHALL REMAIN OPERATIONAL AT ALL TIMES.
5. LOCATIONS AND ELEVATIONS OF EXISTING PIPING, BUILDINGS, UTILITIES, AND OTHER SITE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY DEPTHS AND LOCATIONS OF EXISTING PIPING PRIOR TO INSTALLING NEW PIPING THAT CONNECTS TO EXISTING.



**PLANNING AND ZONING SUBMITTAL SET
NOT FOR CONSTRUCTION**



NOTE:
ADJOINING PROPERTY LINES ARE SHOWN IN THEIR APPROXIMATE LOCATION.

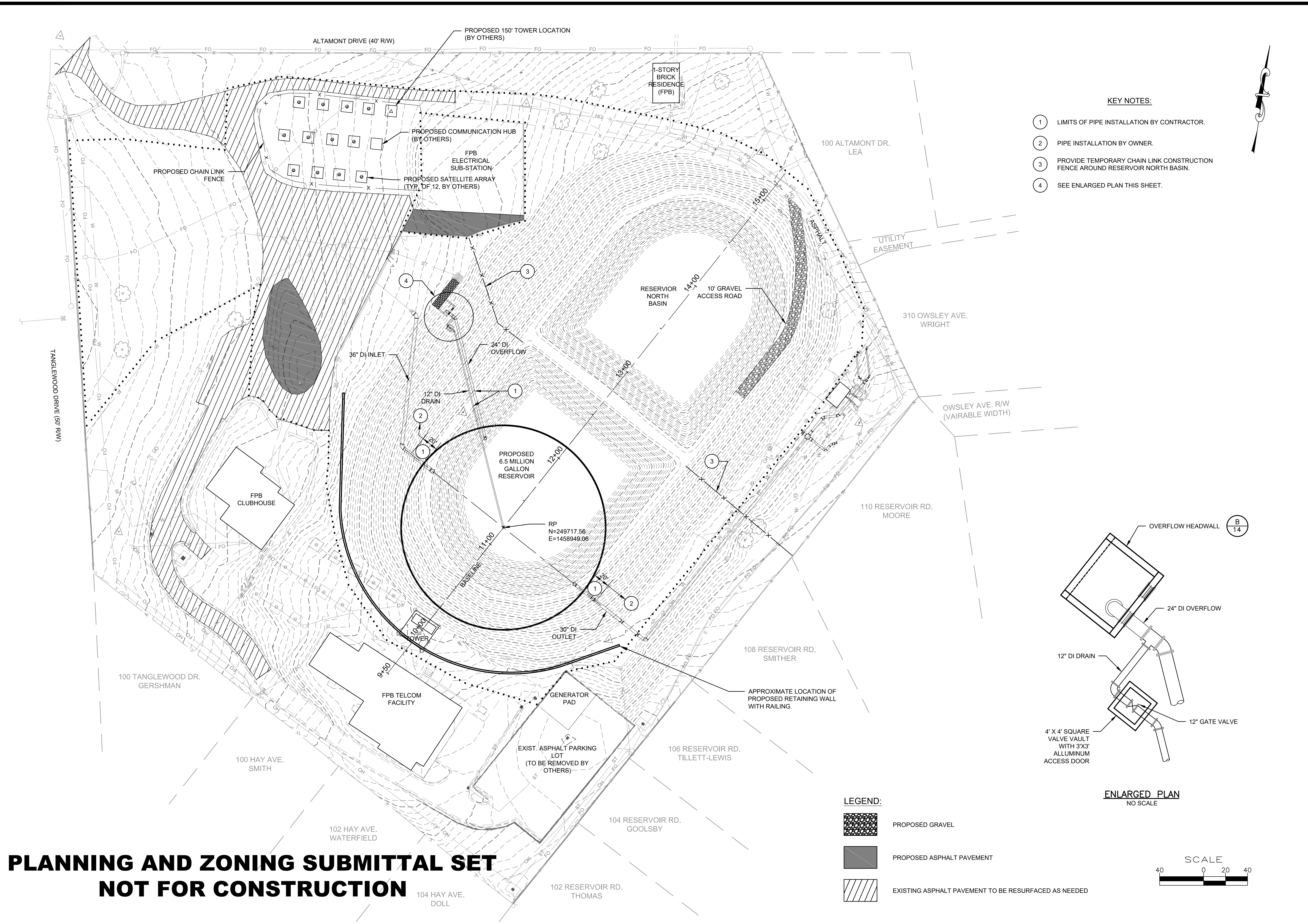
NO.	REVISIONS	DATE:

**PHASE 1 CONSTRUCTION
DEMOLITION PLAN**
WATER STORAGE IMPROVEMENT PROJECT
FRANKFORT ELECTRIC AND WATER PLANT BOARD
FRANKFORT, KENTUCKY

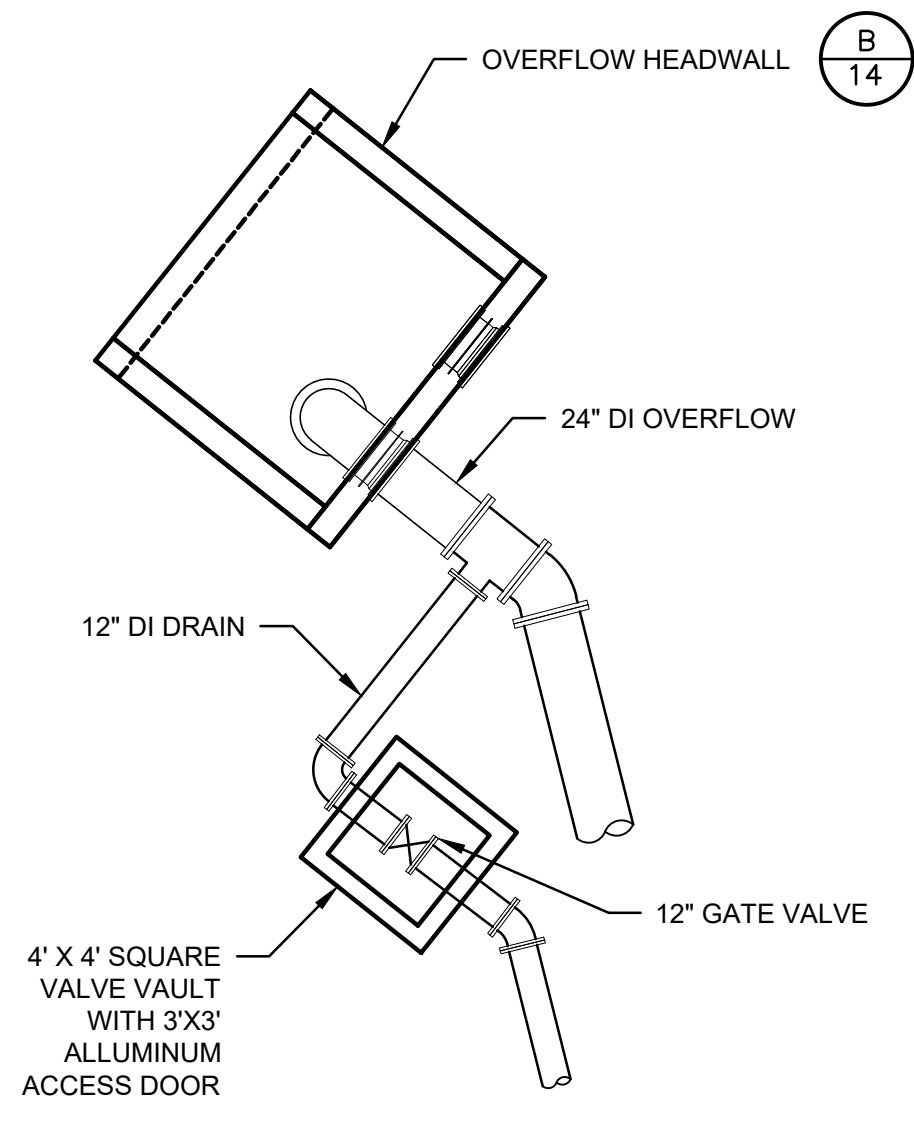
JOB NO.
2012.004
PROJECT MGR.
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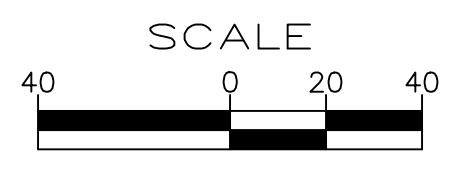
SHEET
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- KEY NOTES:**
- 1 LIMITS OF PIPE INSTALLATION BY CONTRACTOR.
 - 2 PIPE INSTALLATION BY OWNER.
 - 3 PROVIDE TEMPORARY CHAIN LINK CONSTRUCTION FENCE AROUND RESERVOIR NORTH BASIN.
 - 4 SEE ENLARGED PLAN THIS SHEET.



- LEGEND:**
- PROPOSED GRAVEL
 - PROPOSED ASPHALT PAVEMENT
 - EXISTING ASPHALT PAVEMENT TO BE RESURFACED AS NEEDED



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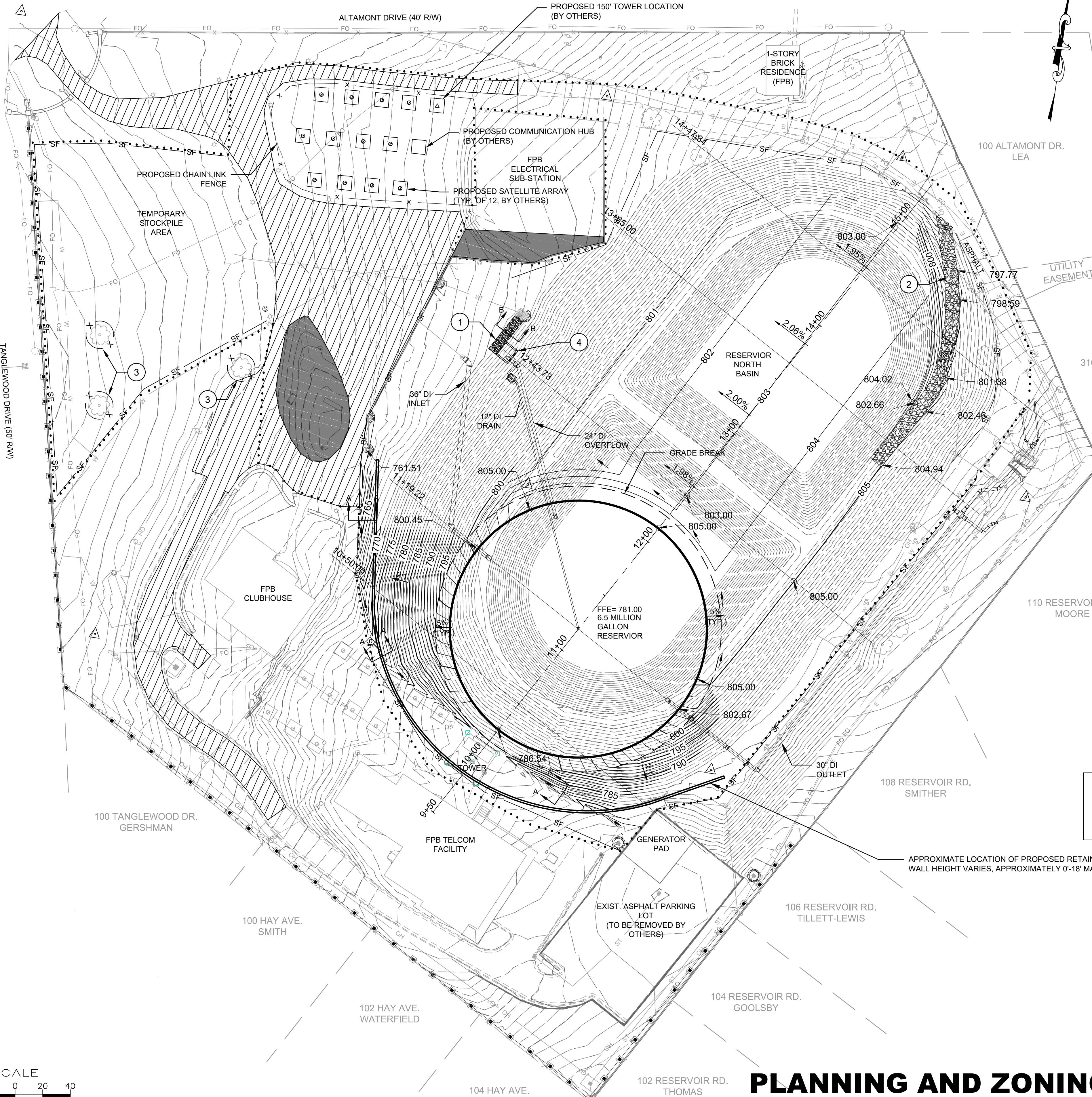
**PHASE 1 CONSTRUCTION
SITE PLAN**
WATER STORAGE IMPROVEMENT PROJECT
FRANKFORT ELECTRIC AND WATER PLANT BOARD
FRANKFORT, KENTUCKY

JOB NO.
2012.004
PROJECT MGR.
ADW



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**PLANNING AND ZONING SUBMITTAL SET
NOT FOR CONSTRUCTION**



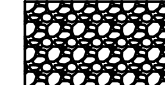

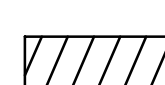
GENERAL NOTES:

1. EROSION CONTROL MEASURES INDICATED ON THE DRAWINGS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS REQUESTED BY THE ENGINEER OR GOVERNING AGENCY.
2. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
3. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
4. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED.

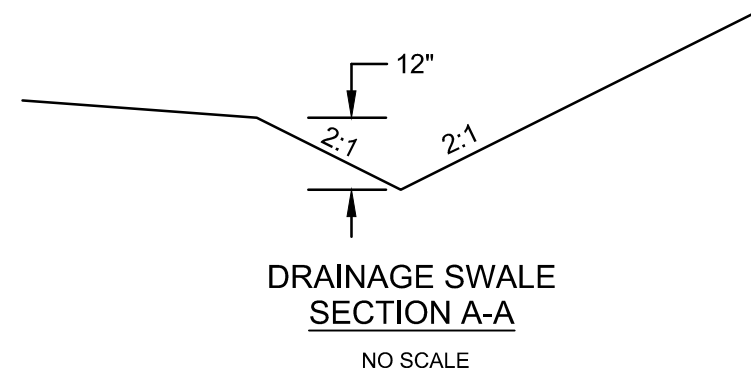
KEY NOTES:

1. DRAINAGE SPREADER, SEE SECTION B-B, THIS SHEET.
2. 10' GRAVEL ACCESS DRIVE, SEE DETAIL (A/14).
3. TREE PROTECTION, SEE DETAIL (F/13).
4. OVERFLOW HEADWALL, SEE DETAIL (B/14).

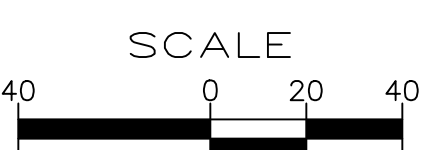
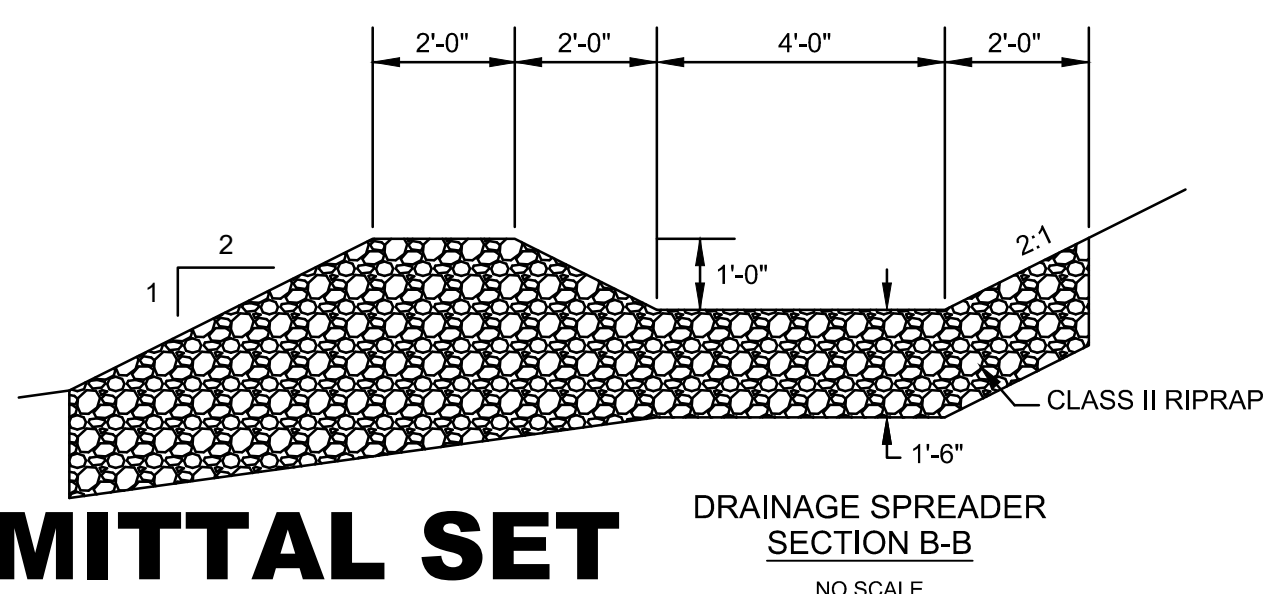
LEGEND:

-  PROPOSED GRAVEL
-  PROPOSED ASPHALT PAVEMENT
-  EXISTING ASPHALT PAVEMENT TO BE RESURFACED AS NEEDED

NOTE:
SITE GRADING TO BE REVISED IN FINAL DESIGN PENDING FINAL RETAINING WALL ALIGNMENT.



APPROXIMATE LOCATION OF PROPOSED RETAINING WALL WITH RAILING. WALL HEIGHT VARIES, APPROXIMATELY 0'-18" MAXIMUM.



**PLANNING AND ZONING SUBMITTAL SET
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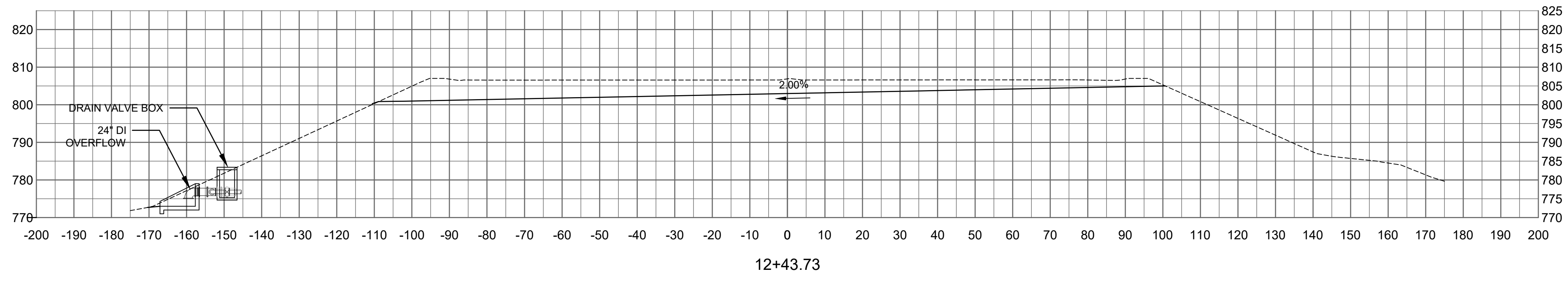
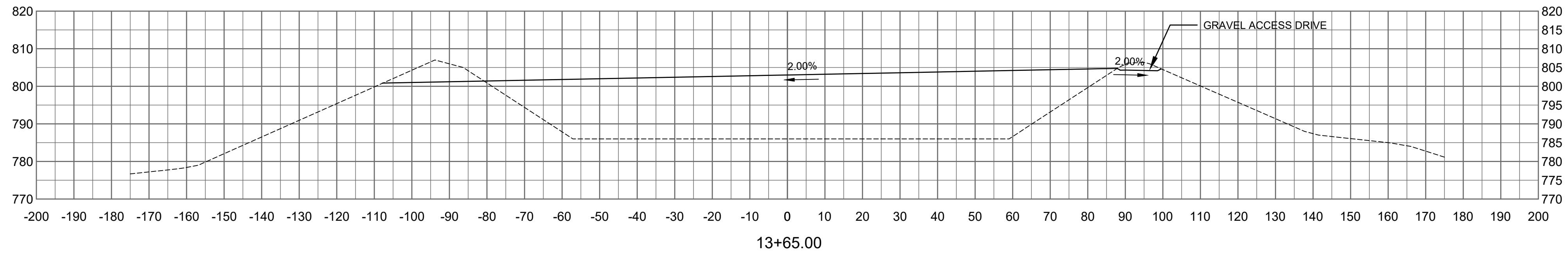
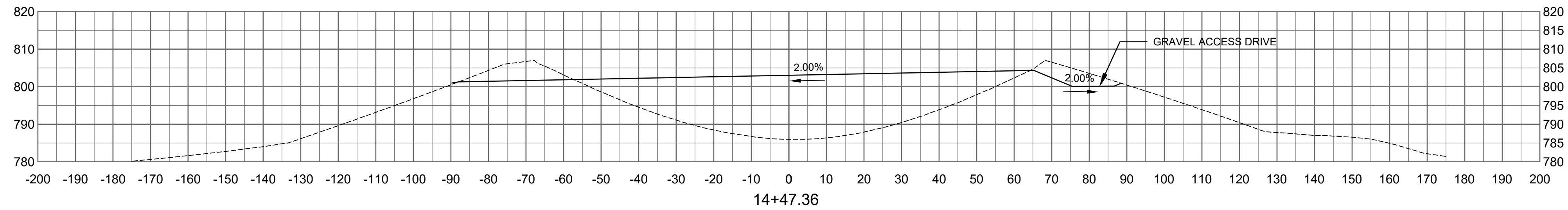
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PHASE 1 CONSTRUCTION
GRADING AND EROSION CONTROL PLAN
WATER STORAGE IMPROVEMENT PROJECT
FRANKFORT ELECTRIC AND WATER PLANT BOARD
FRANKFORT, KENTUCKY

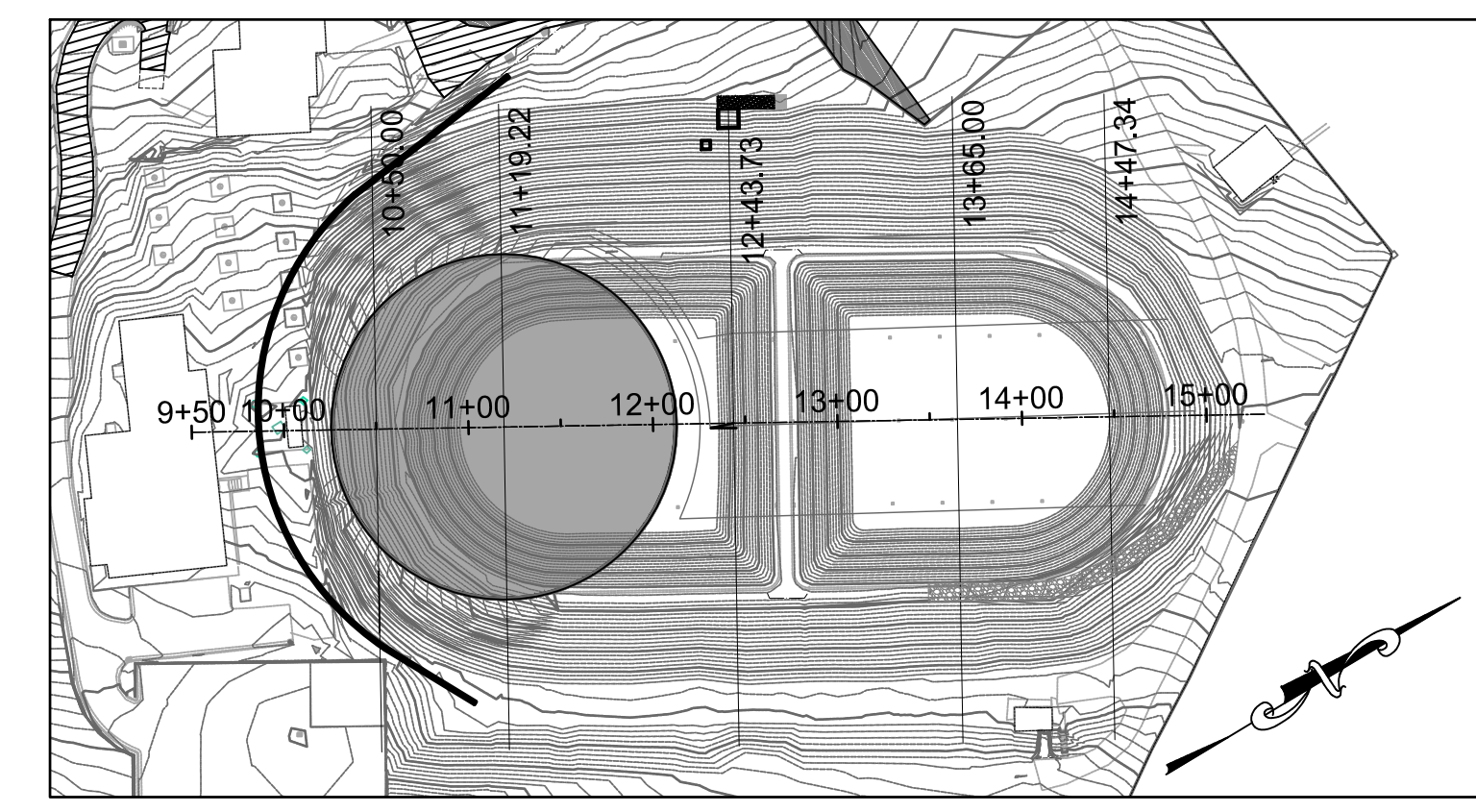
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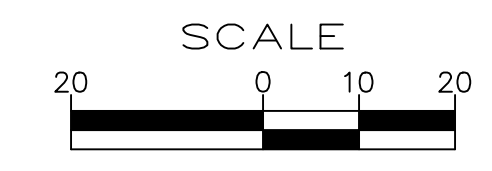
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NOTE:
 GRADING SHOWN IN SECTIONS IS APPROXIMATE PENDING FINAL GRADING AND RETAINING WALL ALIGNMENT.



KEY MAP
 NTS



NO.	REVISIONS	DATE:

PHASE 1 CONSTRUCTION
SECTIONS - 2
 WATER STORAGE IMPROVEMENT PROJECT
 FRANKFORT ELECTRIC AND WATER PLANT BOARD
 FRANKFORT, KENTUCKY

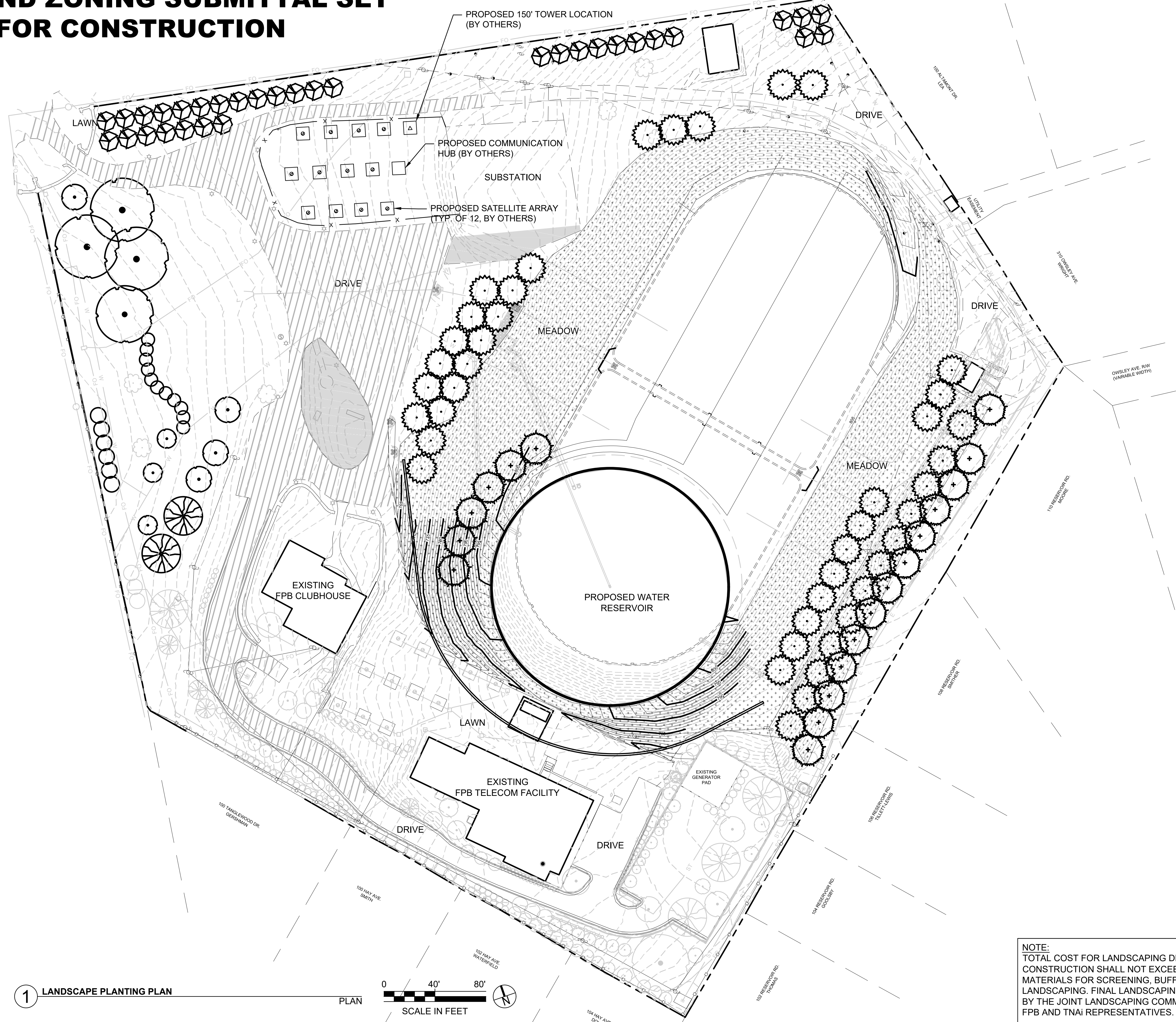
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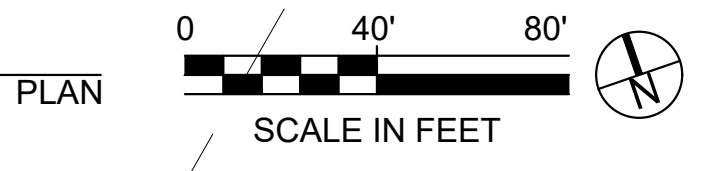
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PLANNING AND ZONING SUBMITTAL SET
NOT FOR CONSTRUCTION

PLANNING AND ZONING SUBMITTAL SET NOT FOR CONSTRUCTION



1 LANDSCAPE PLANTING PLAN



NOTE:
TOTAL COST FOR LANDSCAPING DESIGN, MATERIALS AND CONSTRUCTION SHALL NOT EXCEED \$250,000, INCLUDING PLANT MATERIALS FOR SCREENING, BUFFER ZONES, AND INTERIOR SITE LANDSCAPING. FINAL LANDSCAPING PLAN TO BE DETERMINED BY THE JOINT LANDSCAPING COMMITTEE COMPRISED OF FPB AND TNAI REPRESENTATIVES.

NO.	REVISIONS	DATE

PHASE 2 CONSTRUCTION
CONCEPTUAL LANDSCAPE PLANTING PLAN
WATER STORAGE IMPROVEMENT PROJECT
FRANKFORT ELECTRIC AND WATER PLANT BOARD
FRANKFORT, KENTUCKY

JOB NO.
2012.004
PROJECT MGR.
ADW



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PLANNING AND ZONING SUBMITTAL SET

NOT FOR CONSTRUCTION

PLANTING NOTES

1. MATERIALS:

A. PLANT MATERIAL: GROWN IN RECOGNIZED NURSERY IN ACCORDANCE WITH EXCELLENT HORTICULTURAL PRACTICES.

1. TREE MATERIAL SHALL COMPLY WITH THE SIZING AND GRADING STANDARDS OF "AMERICAN STANDARD FOR NURSERY STOCK" ANSI Z60.1-2014.
2. PROVIDE HEALTHY, VIGOROUS STOCK GROWN UNDER CLIMATE CONDITIONS IN THE LOCALITY OF THE PROJECT FREE OF DISEASE, INSECTS, EGGS, LARVAE AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS OR DISFIGUREMENTS.
3. PROVIDE FRESHLY DUG TREES, COLD STORAGE PLANTS ARE NOT ACCEPTABLE.
4. DO NOT PRUNE PRIOR TO DELIVERY. DO NOT BEND OR BIND-TIE TREES IN SUCH MANNER AS TO DAMAGE BARK, BREAK BRANCHES OR DESTROY NATURAL SHAPE.
5. CONTAINER STOCK SHALL HAVE GROWN THEREIN A MINIMUM OF FOUR MONTHS AND MAXIMUM OF 1-1/2 YEARS, WITH ROOTS FILLING THE CONTAINER BUT SHOWING NO EVIDENCE OF BEING ROOT-BOUND.

B: SOIL AMENDMENTS:

1. TREE PLANTING SOIL DRENCH, MICROAPPLY SOLUBLE MAXX: 220 MICRONS, PASSES A #70 SCREEN. CONTAINS 9 SPECIFICALLY SELECTED ENDO MYCORRHIZAL SPECIES GLOMUS INTRARADICES, G. AGGREGATUM, G. ETUNICATUM, G. MOSSEAE, G. DESERTICOLA, G. CLARUM, G. BRASILIANUM, MONOSPORUM, GIGASPORA MARGARITA AND 11 SPECIES OF ECTOMYCORRHIZAL FUNGI RHIZOPOGON VILLOSULLUS, R. LUTEOLUS, R. AMYLOPOGON, R. FULVIGLEBA, PISOLITHUS TINCTORIUS, SCLERODERMA CEPA S. CITRINUM, SUILLUS GRANULATUS, SUILLUS PUNCTATAPIES, LACCARIA LACCATA AND L. BICOLOR. ALSO CONTAINS TWO TRICHODERMA FUNGAL SPECIES, 15 BENEFICIAL BACTERIAL SPECIES, HUMICS, KELP, AND VITAMINS.
2. COMPLETE FERTILIZERS: APPROVED BRANDS MEETING REQUIREMENTS OF APPLICABLE STATE FERTILIZER LAWS. UNIFORM IN COMPOSITION, DRY AND FREE FLOWING. DELIVER TO THE SITE IN ORIGINAL UNOPENED CONTAINERS, EACH BEARING MANUFACTURER'S GUARANTEED ANALYSIS. TREE PIT INCORPORATION FERTILIZER: 16-16-16.

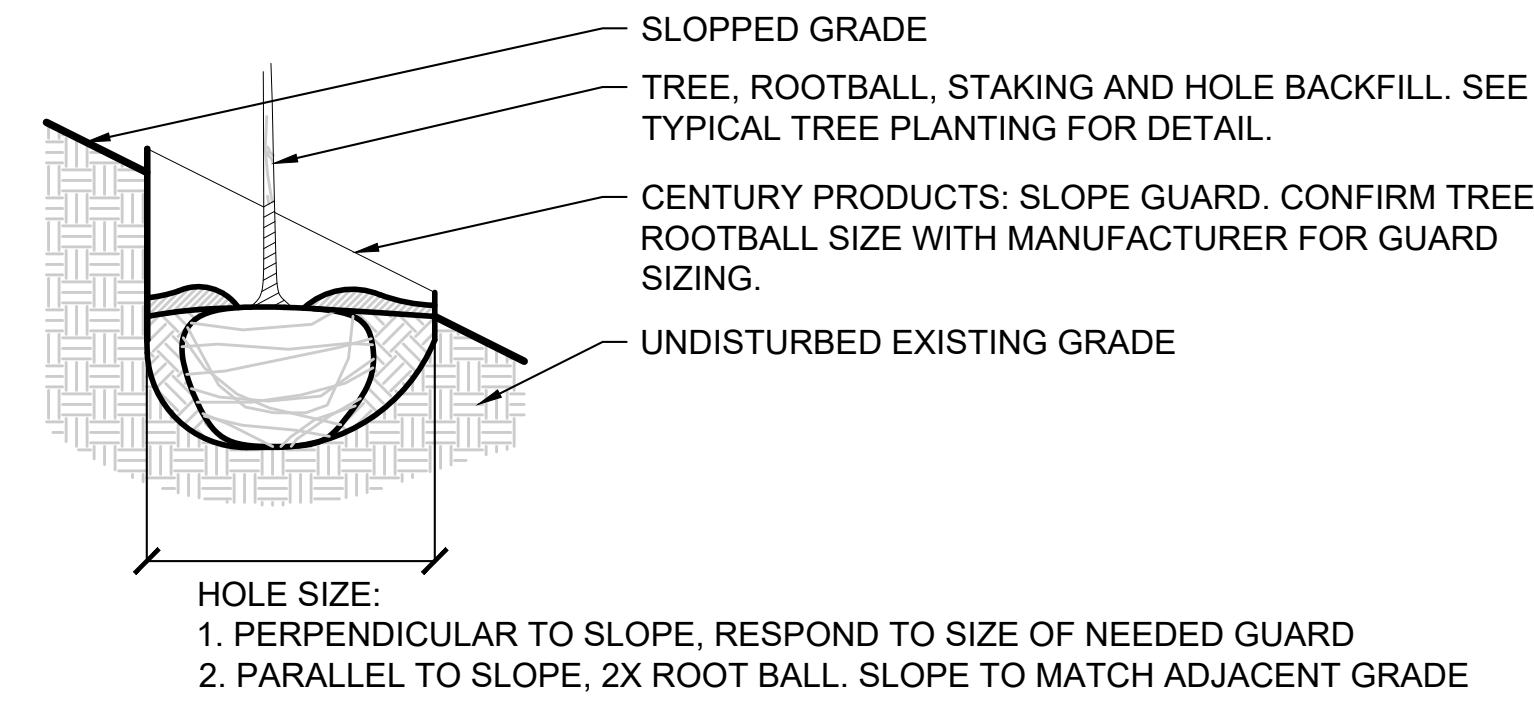
3. MULCH: FINE SCREENED COMPOST: USCC TESTED AND APPROVED COMPOST ORIGINATING FROM CONSUMER GREEN WASTE THEN SCREENED. APPLIED AROUND TREES IN 2" LAYER.
4. 3-WAY BLEND SOIL: THE MATERIAL SHALL BE A BLEND OF LOAMY TOPSOIL, SAND AND 30% COMPOST (BY VOLUME) PROCESSED THROUGH A 1/2" SCREEN.

C: MISCELLANEOUS MATERIALS:

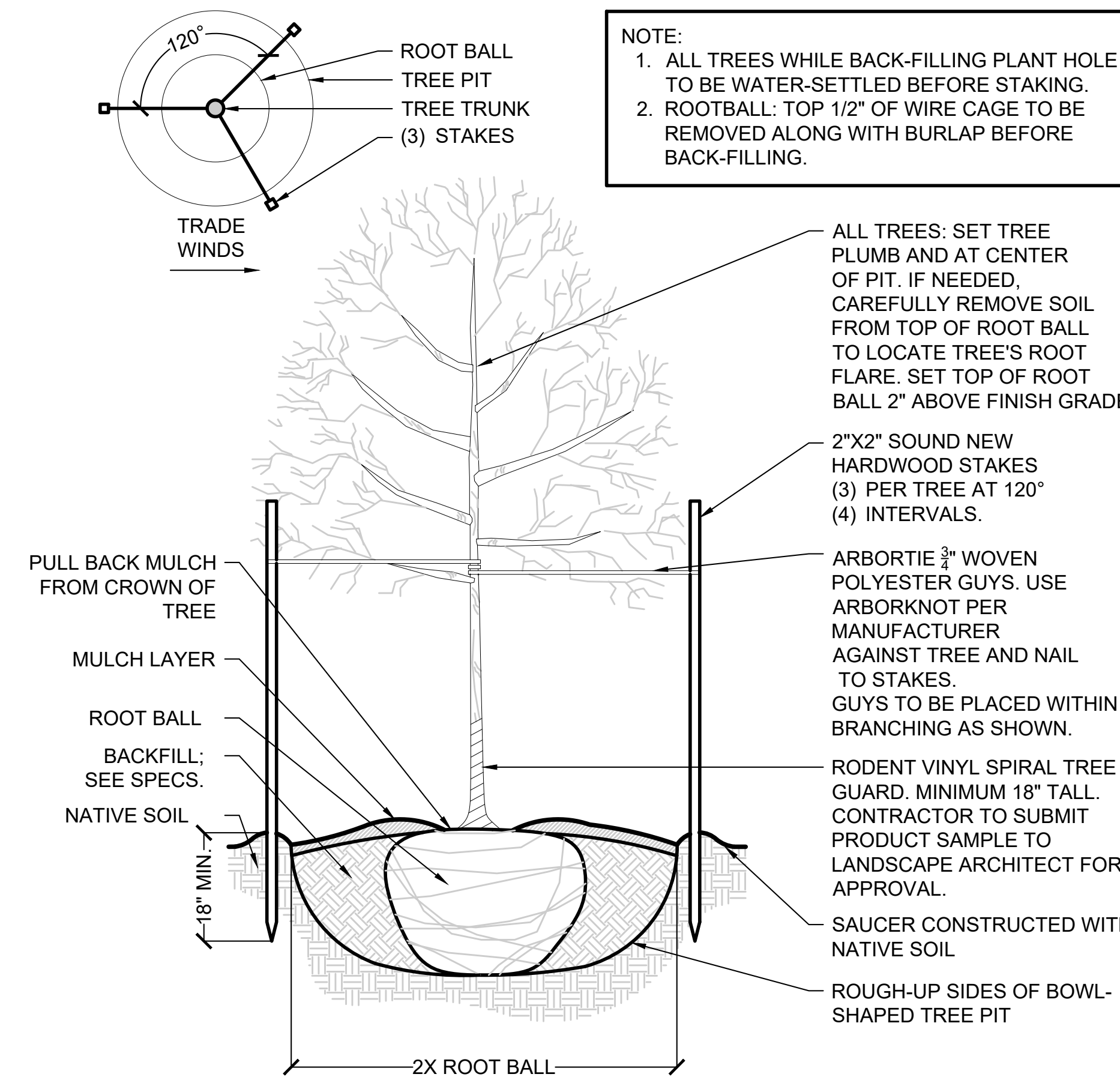
1. STAKES AND GUYS: STAKES TO BE 2"x2" SOUND NEW HARDWOOD FREE OF KNOTS AND OTHER DEFECTS. GUYS BY DEEPROOT, ARBORTIE 3/4" FLAT WOVEN POLYESTER MATERIAL. SEE TREE PLANTING DETAIL.
2. PLANT SCHEDULE: SEE PLANTING PLAN

2. INSTALLATION:

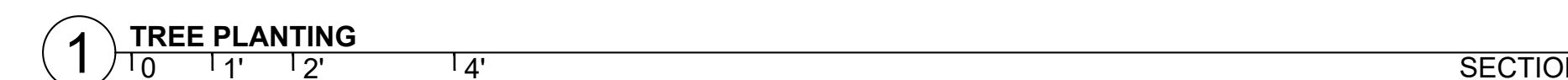
- A. REMOVE AND LEGALLY DISPOSE OF POTENTIAL ANAEROBIC SUBSOIL WORKED UP DURING SOIL PREPARATION OPERATIONS.
- B. INSTALL PLANT MATERIAL AFTER FINAL GRADES ARE ESTABLISHED.
- C. IF NEEDED, CAREFULLY REMOVE SOIL FROM TOP OF ROOT BALL TO LOCATE TREE'S ROOT FLARE.
- D. DIG TREE PLANTING PITS TWO TIMES THE DIAMETER OF THEIR ROOT-BALLS. ASSURE PLANTING PITS DRAIN. TREE PLANTING DEPTH SHALL BE THE SIZE OF THE ROOT BALL WITH THE TREE FLARE BEING 2" ABOVE FINISH GRADE. ROUGH UP SIDES OF THE BOWL-SHAPED TREE PIT. REMOVE BURLAP AND WIRE CAGE AROUND ROOT-BALL BEFORE PLANTING BEING CAREFULLY NOT TO DISTURB THE ROOT-BALL'S INTEGRITY.
- E. B&B TREES 1 3/4" CAL. OR SMALLER TO HAVE ENTIRE WIRE BASKET REMOVED. ONCE IN THE PLANTING HOLE AND SECURED, REMOVE BURLAP TO EXPOSE ROOTS. WATER-SETTLE BACKFILL.
- F. BACKFILL - BLEND THE FOLLOWING THOROUGHLY:
 1. 50% - 3-WAY BLEND
 2. 50% - NATIVE SOIL
 3. TREE PIT INCORPORATION FERTILIZER: 16-16-16. APPLY PER MANUFACTURER'S SPECIFICATION.
- G. APPLY 'MICROAPPLY SOLUBLE MAXX' FINE POWDER DRENCH TO ALL TREES AFTER PLANTING AND BEFORE MULCHING. RATE: 1 LB. PER 200 GALLONS. DRENCH ROOT ZONE WITH 4 GALLONS PER TREE.
- H. STAKE TREES WITH 2"x2" SOUND NEW HARDWOOD STAKES, SEE PLANTING DETAIL.
- I. MULCH TREE WITH 2" LAYER OF COMPOST.
- J. INSTALL RODENT VINYL SPIRAL TREE GUARD. MINIMUM 18" TALL. CONTRACTOR TO SUBMIT PRODUCT SAMPLES TO LANDSCAPE ARCHITECT FOR APPROVAL
- K. PROCEED WITH AND COMPLETE THE LANDSCAPE WORK AS RAPIDLY AS POSSIBLE WORKING WITHIN THE WEATHER AND SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED. DO NOT PLANT IN SUBFREEZING WEATHER OR IN TEMPERATURES EXCEEDING 90° F.
- L. UPON COMPLETION OF WORK, REMOVE ALL INSTALLATION DEBRIS AND EQUIPMENT, AND LEAVE AREA IN BROOM-CLEAN CONDITION AT THE TIME OF OWNER'S FINAL ACCEPTANCE.



SLOPPED TREE GUARD



TYPICAL TREE PLANTING



PHASE 2 CONSTRUCTION
CONCEPTUAL LANDSCAPE NOTES & DETAILS
 WATER STORAGE IMPROVEMENT PROJECT
 FRANKFORT ELECTRIC AND WATER PLANT BOARD
 FRANKFORT, KENTUCKY

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SHEET
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