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CIVIL SUBMITTAL

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LANDSCAPE PLAN

SITE LIGHTING PLAN AND PHOTOMETRIC GRID

HT Solutions

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

FINAL DEVELOPMENT PLAN

BUILDING EXPANSION

UTILITIES

City of Lee's Summit
Department of Public Works
220 SE Green
Lee's Summit, Mo.
816-969-1800

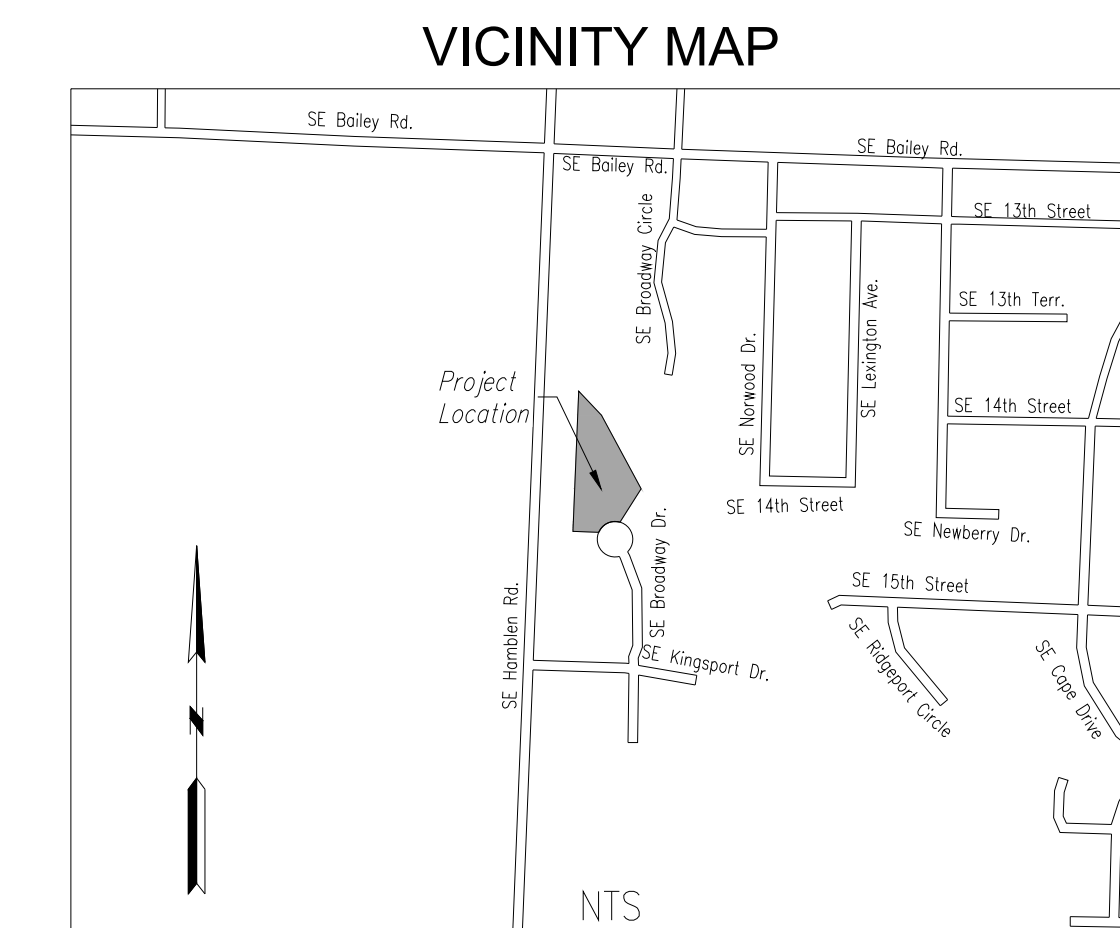
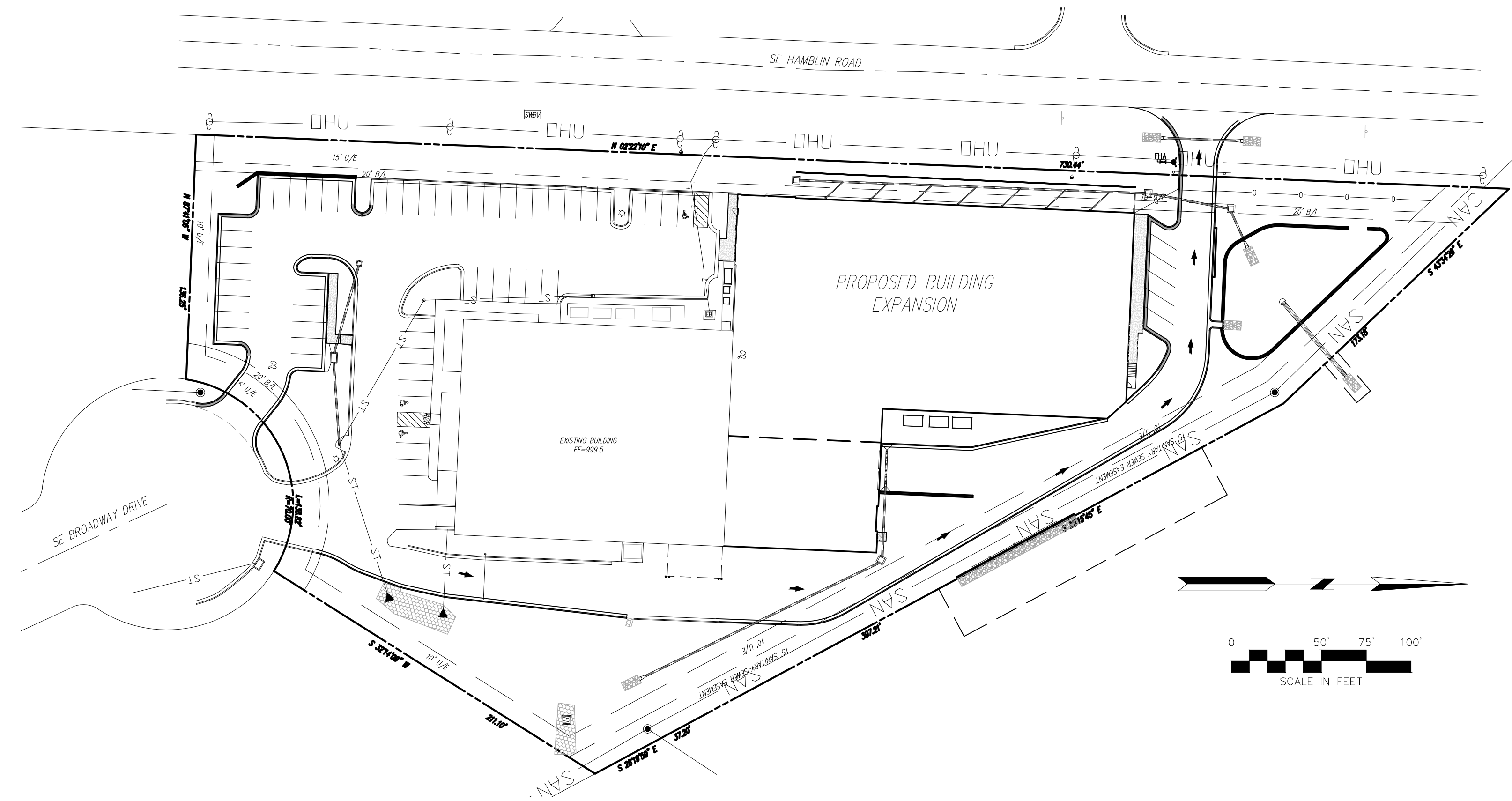
KCPL
401 SE Bailey Road
Lee's Summit, Mo. 64081
816-347-4320

Spire
Robbie Saulsberry
(Administrative Offices)
3025 SE Clover Road
Lee's Summit, MO
816-969-2266

AT&T
Craig Perkins
500 E. 8th Street
Kansas City, MO 64106
816-275-2721

Comcast
New Construction Hotline
866-771-2281

Missouri One Call
1-800-344-7483



GENERAL NOTES:

1. The underground utilities shown herein have been plotted from available information and do not necessarily reflect the actual existence, or nonexistence, size, type, number, or locations of these or other utilities. The contractor shall be responsible for verifying the actual locations of all underground utilities, shown or not shown, and said utilities shall be located in the field prior to any grading, excavation, or construction of improvements. These provisions shall in no way absolve any party from complying with the "UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT", Chapter 319, RSMO.
2. Gas, Water, and other Utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers, including building laterals.
3. Prior to submittal of construction bids, the Contractor shall be required to visit the site to verify existing conditions and proposed improvements.
4. The Contractor shall be responsible for notification and coordination with all Utility Companies.
5. The Contractor shall notify the Engineer immediately of any discrepancies in the plans.
6. All sidewalks shall be ADA compliant.
7. All curb shall be CC-1 unless otherwise noted.
8. There are no oil or gas wells located on the subject property as of November 1, 2018 as shown by the Missouri Geological Survey GEOSTRAT (Geosciences Technical Resource Assessment Tool).

PLANS PREPARED FOR
HT Solutions
1440 SE BROADWAY DRIVE
LEE'S SUMMIT, MO 64081
CONTACT - DAN PHILLIPS
816-554-2520

PLANS PREPARED BY
HG CONSULT
11010 HASKELL ST. #210,
KANSAS CITY, KS 66109
CONTACT: KEVIN STERRETT
816-703-7098

PROJECT BENCHMARK:
#1 Top of Sanitary Manhole lid at south side of site on SE Broadway cul-de-sac.
N: 992422.0300
E: 2829012.5430
TOP ELEV. 1001.50

| NO. | BY | REVISION | DATE |
|-----|-----|--|----------|
| 1 | EDH | Revised per city comments dated 1/20/19 | 1/20/19 |
| 2 | EDH | Revised per city comments dated 4/16/19 | 4/16/19 |
| 3 | EDH | Revised per Mechanical engineers revisions | 5/7/19 |
| 4 | EDH | Construction revisions | 12/10/19 |



12/4/19

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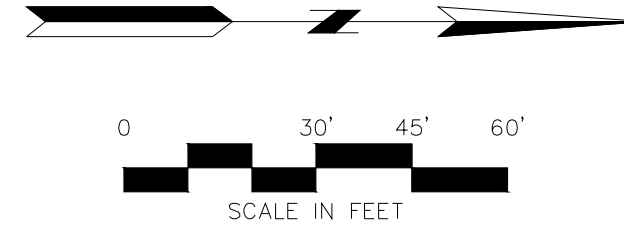
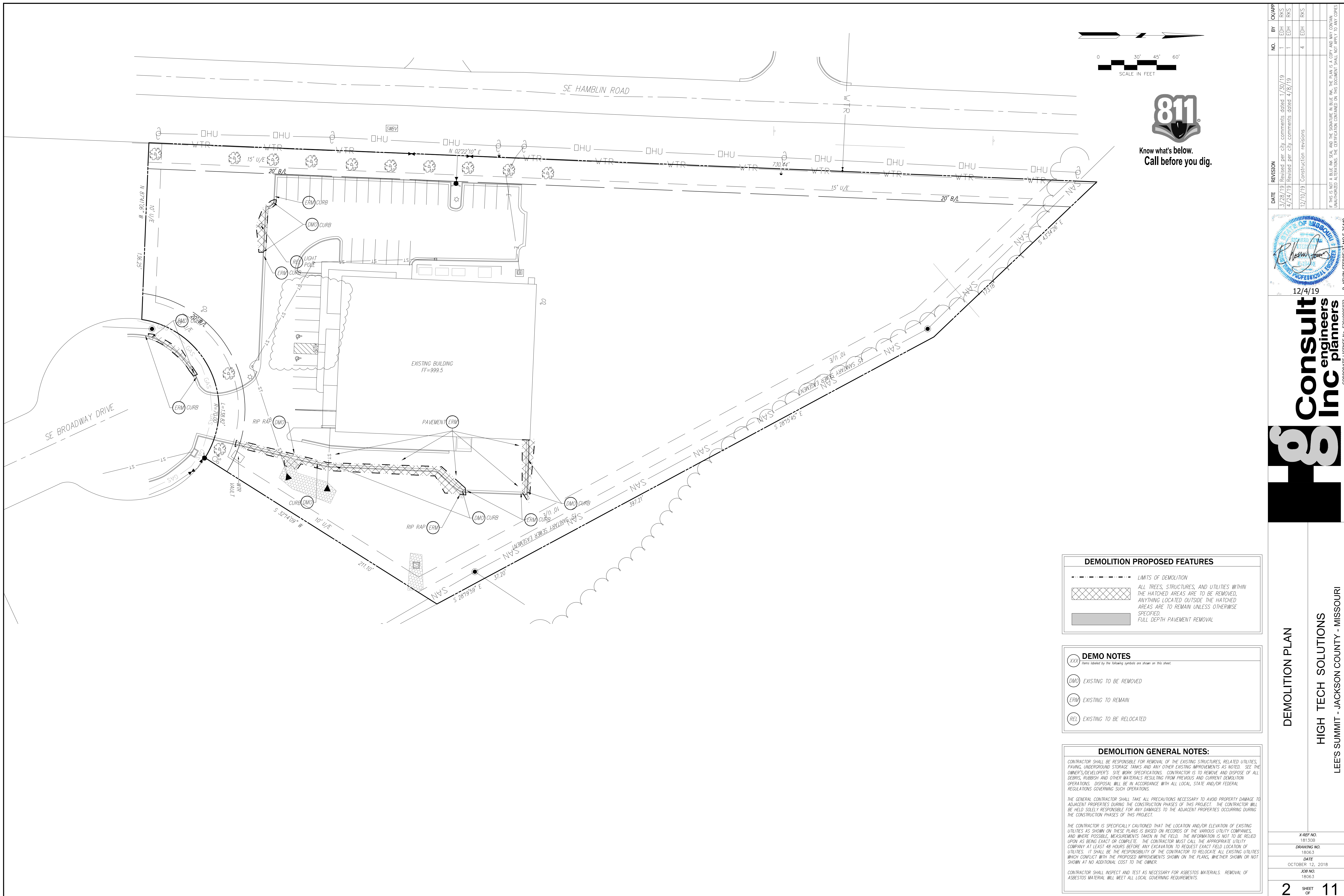
CORPORATE LICENSE NO. E200005873

COVER SHEET

HIGH TECH SOLUTIONS

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

| |
|-----------------------------|
| X-REF NO. 81308 |
| DRAWING NO. 1806.3 |
| DATE OCTOBER 12, 2018 |
| JOB NO. 1806.3 |
| 1 SHEET OF 11 |

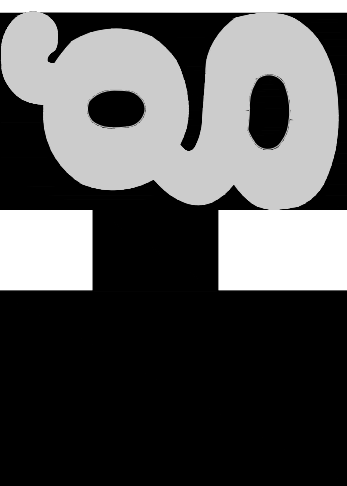


| NO. | BY | DATE | REVISION |
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| 1 | EDH | 1/20/19 | Revised per city comments dated 1/20/19 |
| 2 | EDH | 4/24/19 | Revised per city comments dated 4/16/19 |
| 4 | EDH | 12/10/19 | Construction revisions |



12/4/19 R. KEVIN STERRETT, NO. E-26440

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DEMOLITION PLAN
HIGH TECH SOLUTIONS
LEES SUMMIT - JACKSON COUNTY - MISSOURI

| DEMOLITION PROPOSED FEATURES | |
|------------------------------|---|
| | LIMITS OF DEMOLITION |
| | ALL TREES, STRUCTURES, AND UTILITIES WITHIN THE HATCHED AREAS ARE TO BE REMOVED. ANYTHING LOCATED OUTSIDE THE HATCHED AREAS ARE TO REMAIN UNLESS OTHERWISE SPECIFIED. |
| | FULL DEPTH PAVEMENT REMOVAL |

| DEMO NOTES | |
|------------|---|
| (XXX) | Items labeled by the following symbols are shown on this sheet. |
| (DMO) | EXISTING TO BE REMOVED |
| (ERM) | EXISTING TO REMAIN |
| (REL) | EXISTING TO BE RELOCATED |

DEMOLITION GENERAL NOTES:

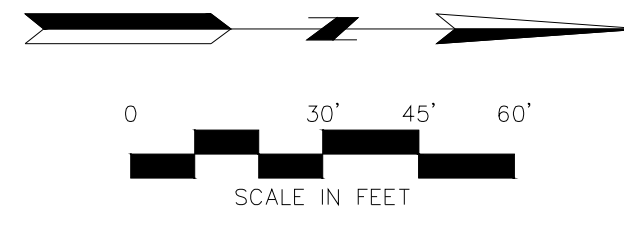
CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, UNDERGROUND STORAGE TANKS AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED. SEE THE OWNER'S/DEVELOPER'S SITE WORK SPECIFICATIONS. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

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 UPON 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. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS, WHETHER SHOWN OR NOT SHOWN AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL INSPECT AND TEST AS NECESSARY FOR ASBESTOS MATERIALS. REMOVAL OF ASBESTOS MATERIAL WILL MEET ALL LOCAL GOVERNING REQUIREMENTS.

| | |
|-------------|------------------|
| X-REF NO. | 181308 |
| DRAWING NO. | 18063 |
| DATE | OCTOBER 12, 2018 |
| JOB NO. | 18063 |

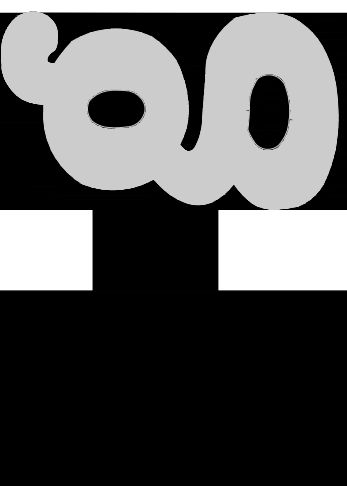


| NO. | BY | DATE | REVISION |
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12/4/19

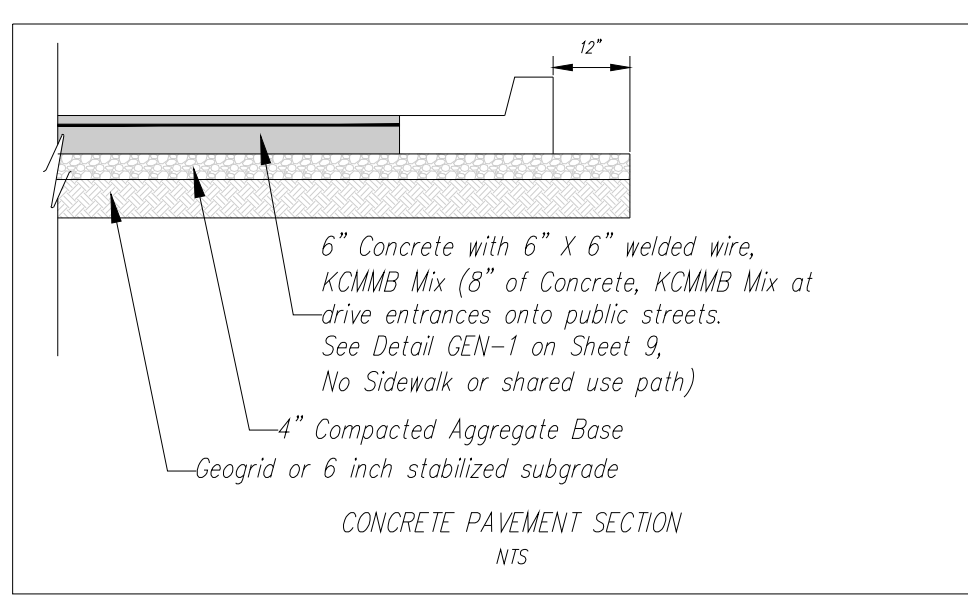
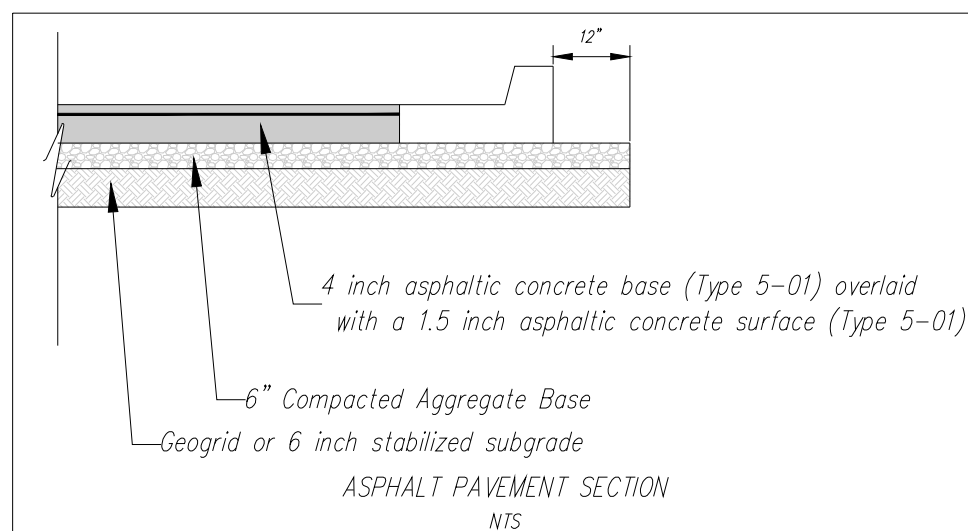
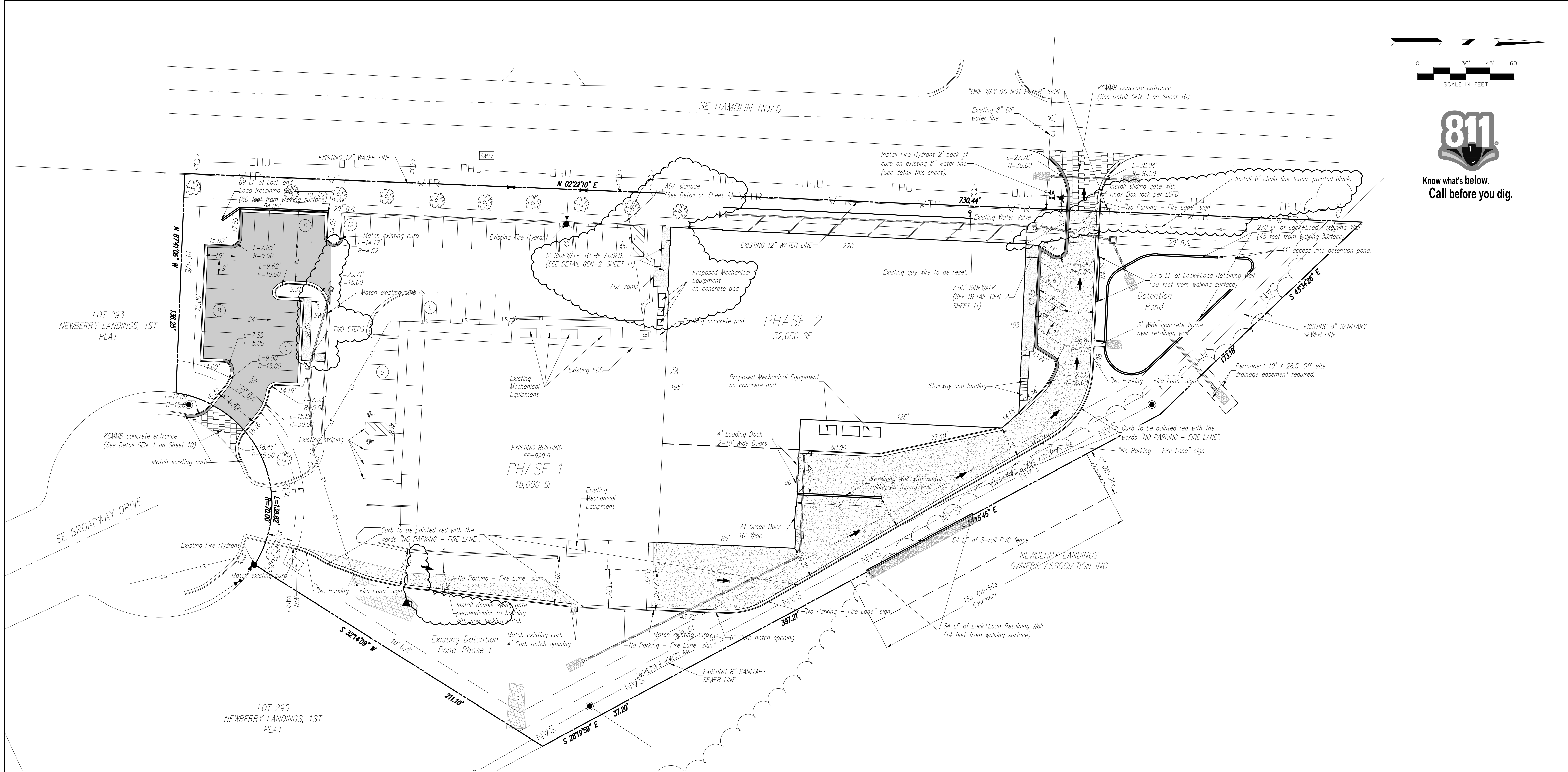
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LEES SUMMIT - JACKSON COUNTY - MISSOURI

OVERALL SITE PLAN
HIGH TECH SOLUTIONS

3 OF 11



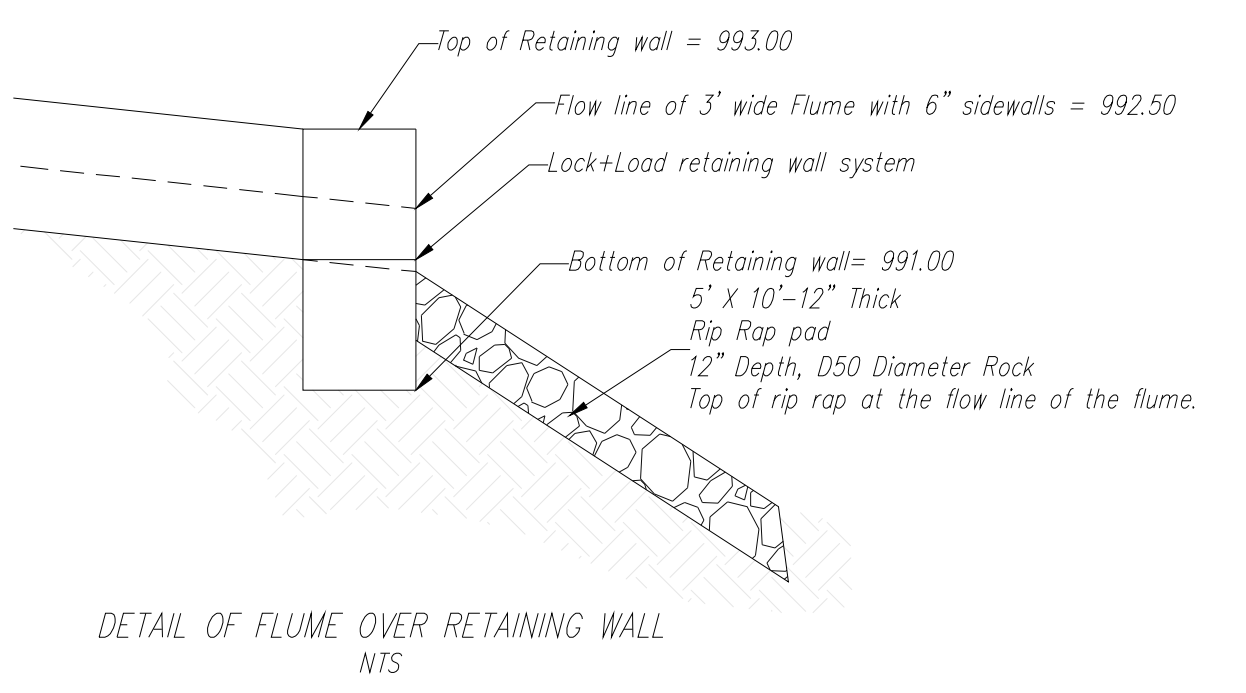
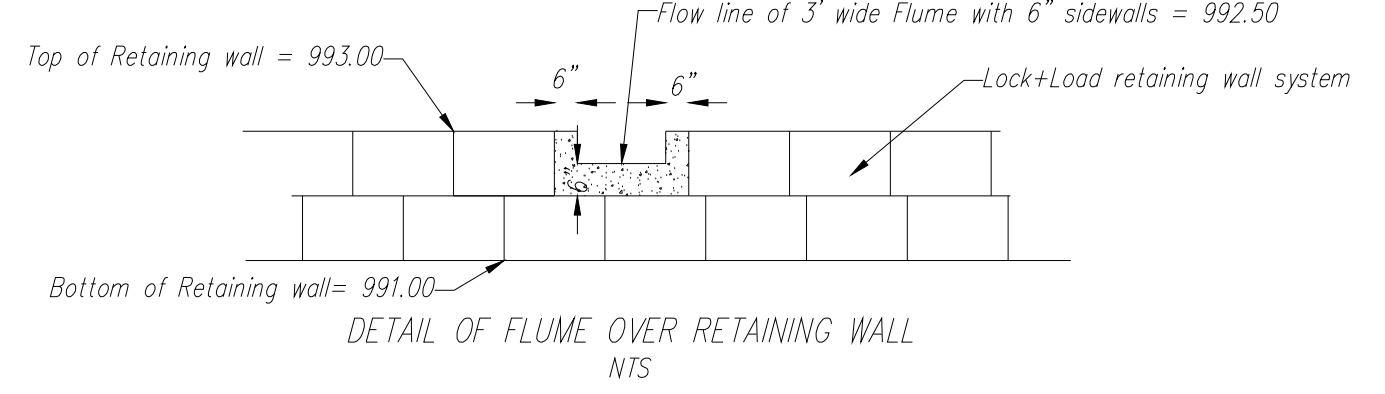
- SITE INFORMATION:**
 Property Description: Lot 292, Newberry Landings-1st Plat
 Site Address: 1440 SE Broadway Dr.
 Zoning: Planned Industrial
 Lot Area: 156,457 SF (3.59 AC)
 FAR: .31 to 1
 Impervious Coverage: 103,772 SF, 66%
- Parking Space Required:**
 Office: 4 spaces/1000 SF = 30 spaces
 Warehouse: 1 space/1000 SF = 12 spaces
 Manufacturing: 2.5 spaces/1000 SF = 91 spaces
 Total parking spaces required = 133 spaces
 *See letter from owner to address parking needs.
 Parking Spaces Provided: 60 spaces
 ADA Spaces Required/Provided: 3/3
 Standard Space Size: 9'x19'
 Planned Use: Manufacturing
 Anticipated Completion: Spring 2019
 Watershed - West Tributary to Prairie Lee Lake (East Fork of Little Blue River)
- 6" Concrete pavement area (See Detail, this sheet)
 - 8" Concrete pavement area (See Detail, this sheet)
 - Asphalt pavement area (See Detail, this sheet)
 - Sidewalk
 - Tip out curb and gutter (See Detail GEN-4, Sheet 9)
 - Retaining wall (See Lock+Load retaining wall submittal)

EXISTING BUILDING 1 - PHASE 1

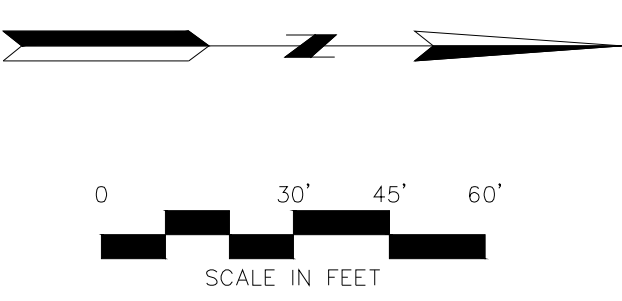
| Building 1 | Office | Mfg | Warehouse | Total |
|-----------------|--------------|---------------|--------------|---------------|
| Main Floor | 3,670 | 10,800 | 3,530 | 18,000 |
| Mezzanine | 1,980 | | 2,340 | 4,320 |
| Total SF | 5,650 | 10,800 | 5,870 | 22,320 |

PROPOSED BUILDING EXPANSION - PHASE 2

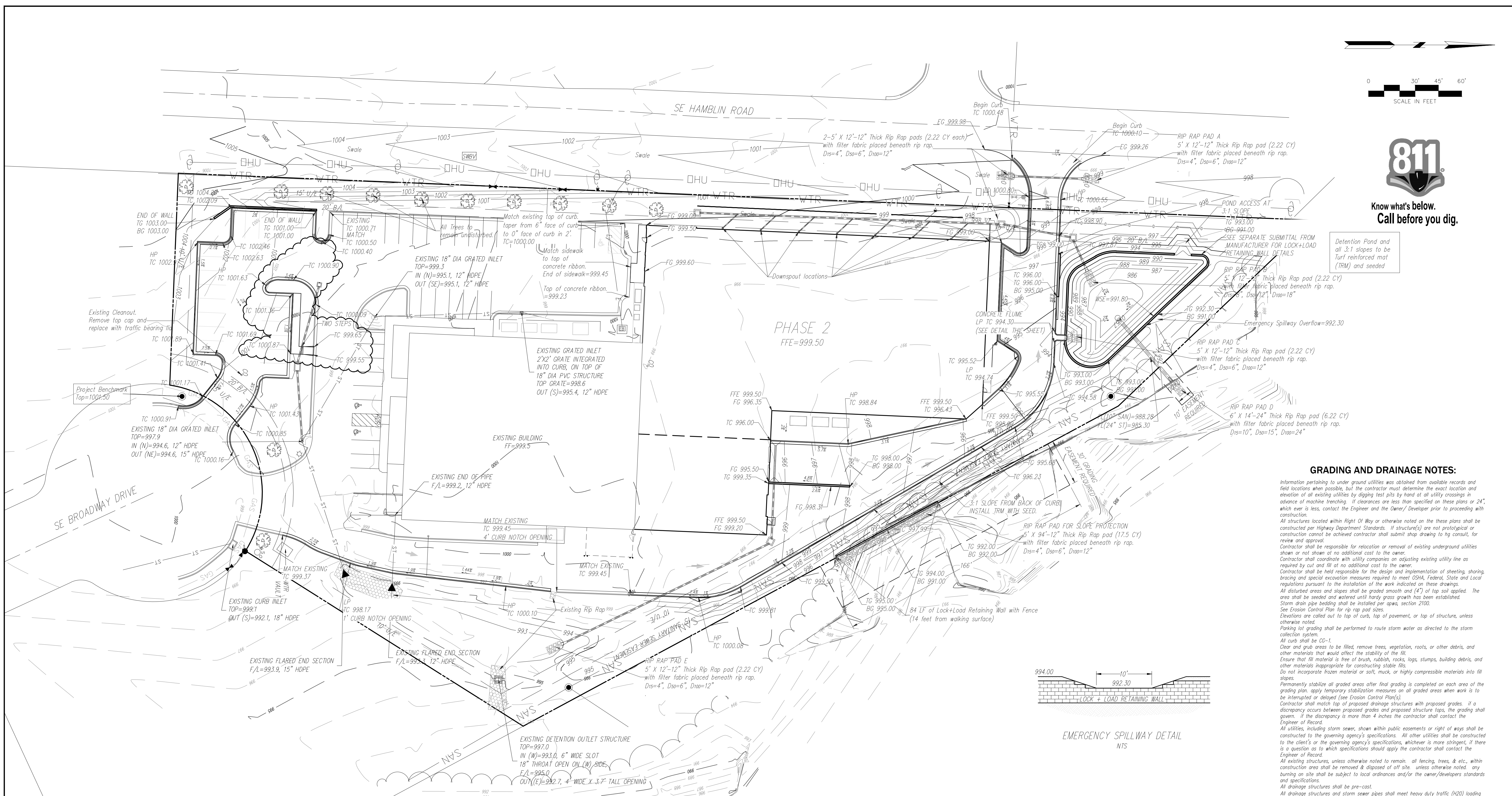
| Building 2 | Office | Mfg | Warehouse | Total |
|-----------------|--------------|---------------|--------------|---------------|
| Main Floor | 900 | 25,300 | 5,900 | 31,150 |
| Mezzanine | 900 | | | 900 |
| Total SF | 1,800 | 25,300 | 5,900 | 32,050 |



- NOTES:**
- All construction and materials to conform to the city and the specifications and details per the Kansas City Metro Chapter APWA. It is advisable that the contractor become familiar with this document in the event that there is a discrepancy between this and the approved plan and the Manual. Advise the design engineer of any discrepancy prior to bidding or working on this project.
 - Silt fence shall be installed at the perimeter of all disturbed areas within the site during construction for erosion control.
 - Contractor shall contact the Public Works Inspections 48 hours prior to commencement of work at (816) 969-1800.
 - Contractor to locate and relocate any existing utilities that may conflict with construction as necessary.
 - All curb shall be CG-1 or integral with the sidewalk.
 - A handicap parking sign, 5" above finish grade, shall be placed at the head of the designated parking space.
 - There shall be two way traffic movement.
 - Perimeter parking area dimensions shown are at the front of curb.
 - ADA accessible ramp to have detectable surface on public handicap ramps only. Detectable surfaces do not need to be installed on the ramps at commercial drives. See KCAPIWA web site for details.
 - Building coordinates are pointed to or measured at the outside face of building foundation corners. Contractor shall confirm building dimensions with structural drawings.
 - Other coordinates are pointed to or measured from the front of curb, back of wall or property corner location.
 - Contractor shall coordinate building entrances, egresses, walkways and door locations with architectural and structural drawings.
 - See architectural/structural/mechanical/electrical drawings for miscellaneous site equipment and pads.
 - Curb to be installed at proposed drives by saw cutting a clean straight edge of existing asphalt and forming curb to edge of existing elevation.



Know what's below.
Call before you dig.



GRADING AND DRAINAGE NOTES:

Information pertaining to underground utilities was obtained from available records and field locations when possible, but the contractor must determine the exact location and elevation of all existing utilities by digging test pits by hand at all utility crossings in advance of machine trenching. If clearances are less than specified on these plans or 24", which ever is less, contact the Engineer and the Owner/Developer prior to proceeding with construction.

All structures located within Right Of Way or otherwise noted on these plans shall be constructed per Highway Department Standards. If structure(s) are not prototypical or construction cannot be achieved contractor shall submit shop drawing to hg consult, for review and approval.

Contractor shall be responsible for relocation or removal of existing underground utilities shown or not shown at no additional cost to the owner.

Contractor shall coordinate with utility companies on adjusting existing utility line as required by cut and fill at no additional cost to the owner.

Contractor shall be held responsible for the design and implementation of sheeting, shoring, bracing and special excavation measures required to meet OSHA, Federal, State and Local regulations pursuant to the installation of the work indicated on these drawings.

All disturbed areas and slopes shall be graded smooth and 4" of top soil applied. The area shall be seeded and watered until hardy grass growth has been established. Storm drain pipe bedding shall be installed per apwa, section 2100.

See Erosion Control Plan for rip rap pad sizes.

Elevations are called out to top of curb, top of pavement, or top of structure, unless otherwise noted.

Parking lot grading shall be performed to route storm water as directed to the storm collection system.

All curb shall be CG-1.

Clear and grub areas to be filled, remove trees, vegetation, roots, or other debris, and other materials that would affect the stability of the fill.

Ensure that all material is free of trash, rubbish, rocks, logs, stumps, building debris, and other materials inappropriate for constructing stable fills.

Do not incorporate frozen material or soft, muck, or highly compressible materials into fill slopes.

Permanently stabilize all graded areas after final grading is completed on each area of the grading plan, apply temporary stabilization measures on all graded areas when work is to be interrupted or delayed (see Erosion Control Plans).

Contractor shall match top of proposed drainage structures with proposed grades. If a discrepancy occurs between proposed grades and proposed structure tops, the grading shall govern. If the discrepancy is more than 4 inches the contractor shall contact the Engineer of Record.

All utilities, including storm sewer, shown within public easements or right of ways shall be constructed to the governing agency's specifications. All other utilities shall be constructed to the client's or the governing agency's specifications, whichever is more stringent, if there is a question as to which specifications should apply the contractor shall contact the Engineer of Record.

All existing structures, unless otherwise noted to remain, all fencing, trees, & etc., within construction area shall be removed & disposed of off site, unless otherwise noted, any burning on site shall be subject to local ordinances and/or the owner/developers standards and specifications.

All drainage structures shall be pre-cast.

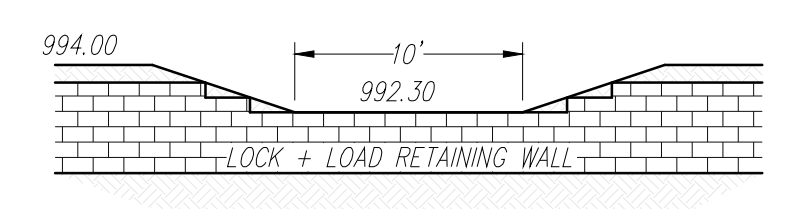
All drainage structures and storm sewer pipes shall meet heavy duty traffic (H20) loading and be installed accordingly.

Contractor shall notify all utility companies having underground utilities on site or in right-of-way prior to excavation. Contractor shall contact utility locating company (STATE ONE CALL system) and locate all utilities prior to grading start.

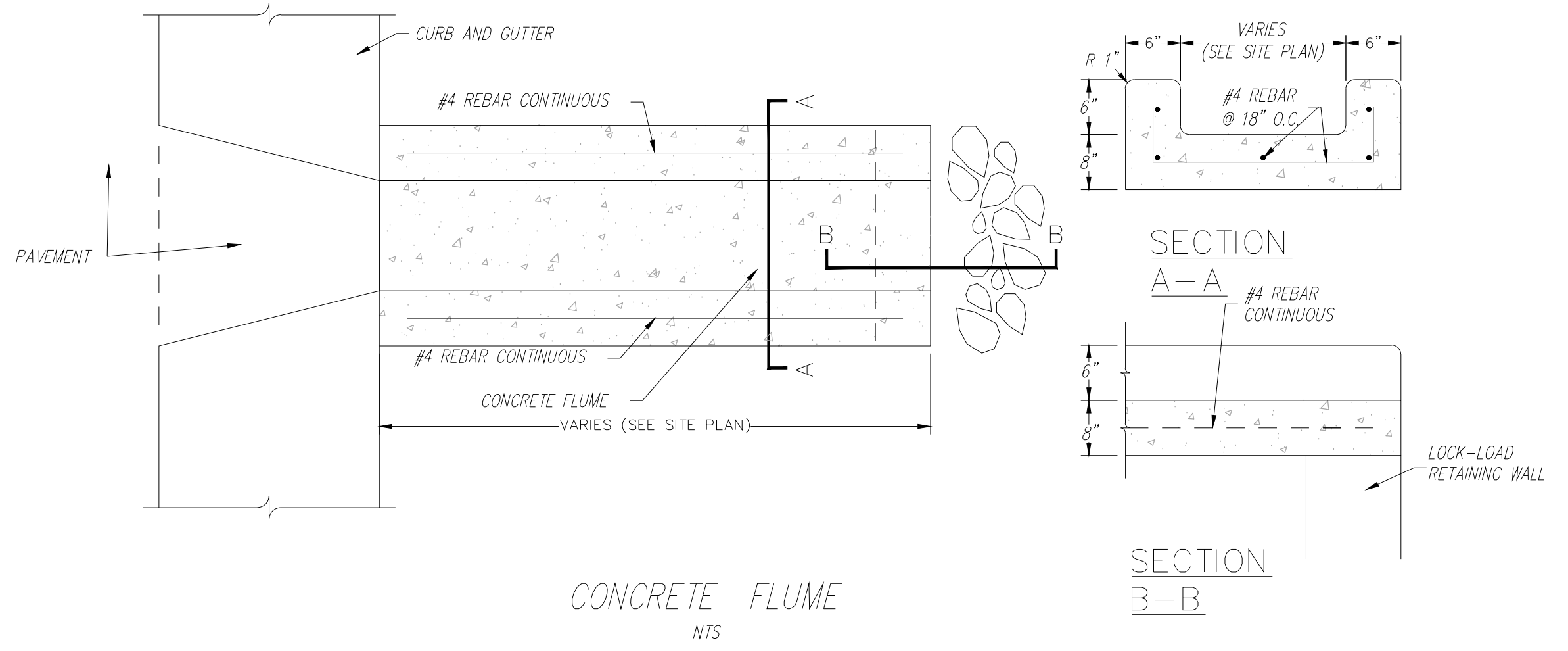
Site grading shall not proceed until Erosion Control measures have been installed.

After permits have been obtained and Erosion Control measures installed, the contractor shall grade building pad & aprons to 0" to -1/2" of subgrade.

**See Storm Water Report for Rip Rap Sizing Calculations.



EMERGENCY SPILLWAY DETAIL
NTS



Rip Rap Sizing Chart

| Rip Rap Location | Pipe Size (In.) | Depth (Ft.) | Width (Ft.) | Length (Ft.) | Specific Weight of Rock (Pcf) | Rock Weight | Velocity (FPS) | D15 (In.) | D50 (In.) Avg. | D100 (In.) | Note |
|------------------|-----------------|-------------|-----------------|--------------|-------------------------------|-------------|----------------|-----------|-------------------|------------|------|
| A | 15 | 12 | 4 (use 5' min.) | 12 | 165 | | 6.2 | 4 | 5 (Use 6 as min.) | 12 | |
| B | 15 | 12 | 4 (use 5' min.) | 12 | 165 | | 9.6 | 8 | 12 | 18 | |
| C | Flume (0.75x3') | 12 | 4 (use 5' min.) | 12 | 165 | | 1.8 | 4 | 6 | 12 | 1 |
| D | 8 | 24 | 4 (Use 6' min.) | 12 | 165 | | 10.6 | 10 | 15 | 24 | |
| E | 12 | 12 | 4 (Use 6 min.) | 12 | 165 | | 4.2 | | 2 (Use 6 as min.) | | 1 |

Notes:
1. Rip Rap is not normally required for velocity below 5 fps, provided for erosion purposes only

- Tip out curb and gutter
- 1' Finish Grade Contours
- 5' Finish Grade Contours
- Finish Grade slope
- Retaining wall

- TC Top of Curb
- FG Finish Grade
- C Gutter Elevation
- HP High Point
- LP Low Point
- FFE Finish Floor Elevation
- TG Top of Grade (Retaining Wall)
- BG Bottom of Grade (Retaining Wall)
- FES Flared End Section
- WSE Water Surface Elevation

PROJECT BENCHMARK:
#1 Top of Sanitary Manhole lid at south side of site on SE Broadway cul-de-sac.
N: 9924.22, 0.000
E: 28290.12, 54.300
TOP ELEV. 1001.50

NO. BY: CVA/PP
1 EDH RKS
1 EDH RKS
4 EDH RKS

REVISION
DATE
3/28/19 Revised per city comments dated 1/20/19
4/24/19 Revised per city comments dated 4/16/19
12/10/19 Construction revisions

12/4/19

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LEES SUMMIT - JACKSON COUNTY - MISSOURI

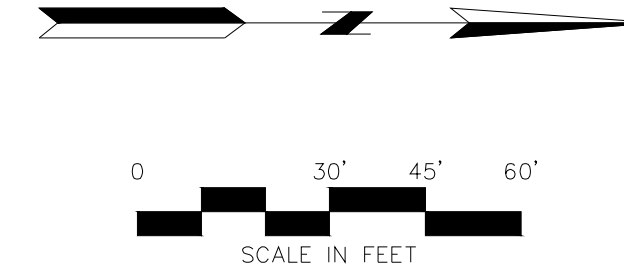
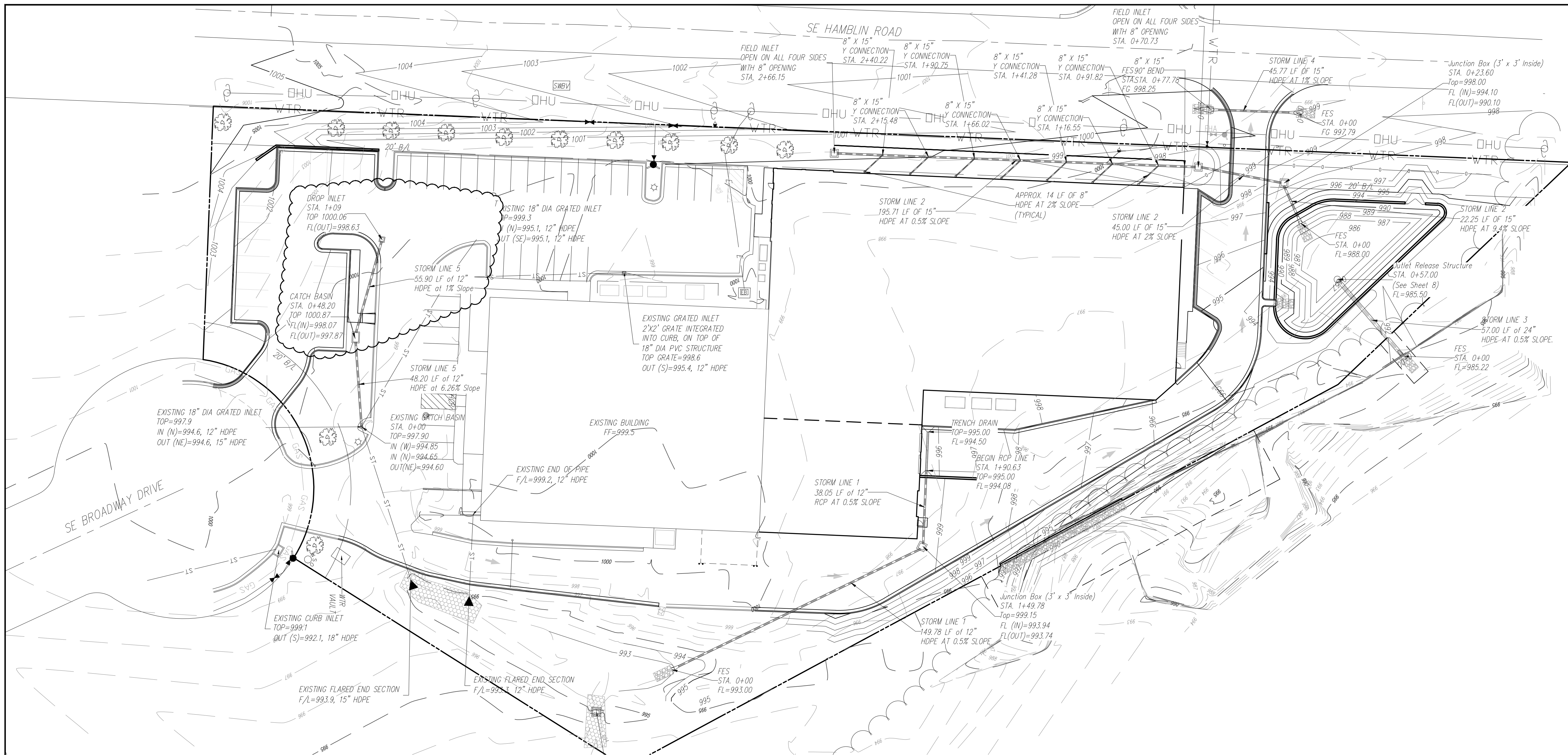
CORPORATE LICENSE NO. E2010005873
R. KEVIN STERRETT, P.E. E-26440

GRADING PLAN

HIGH TECH SOLUTIONS

OCTOBER 12, 2018
JOB NO. 1806.3

4 SHEET OF 11

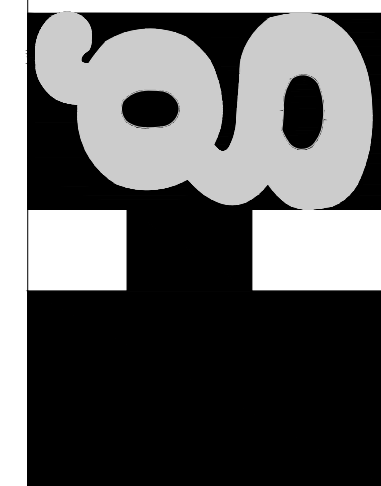


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12/4/19

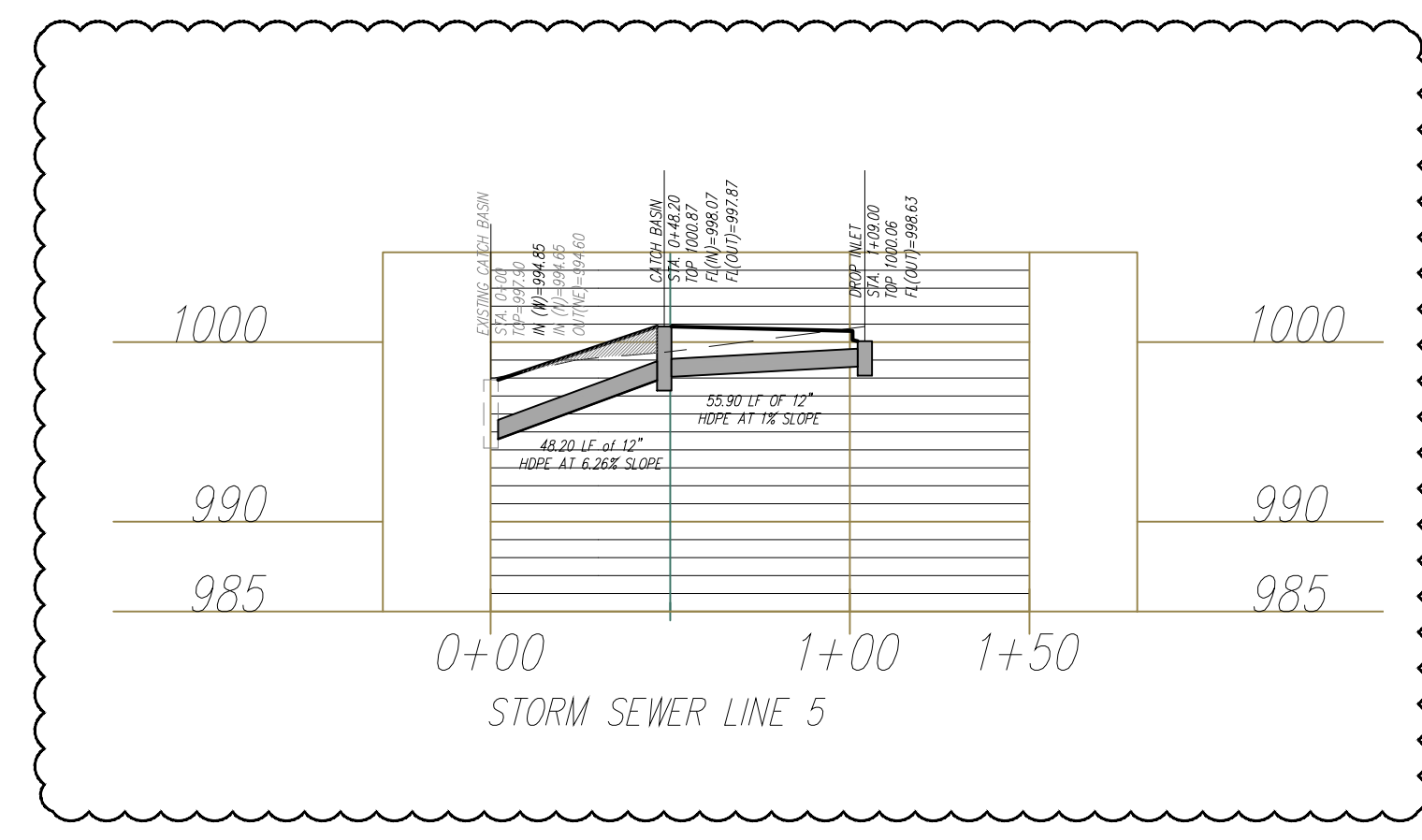
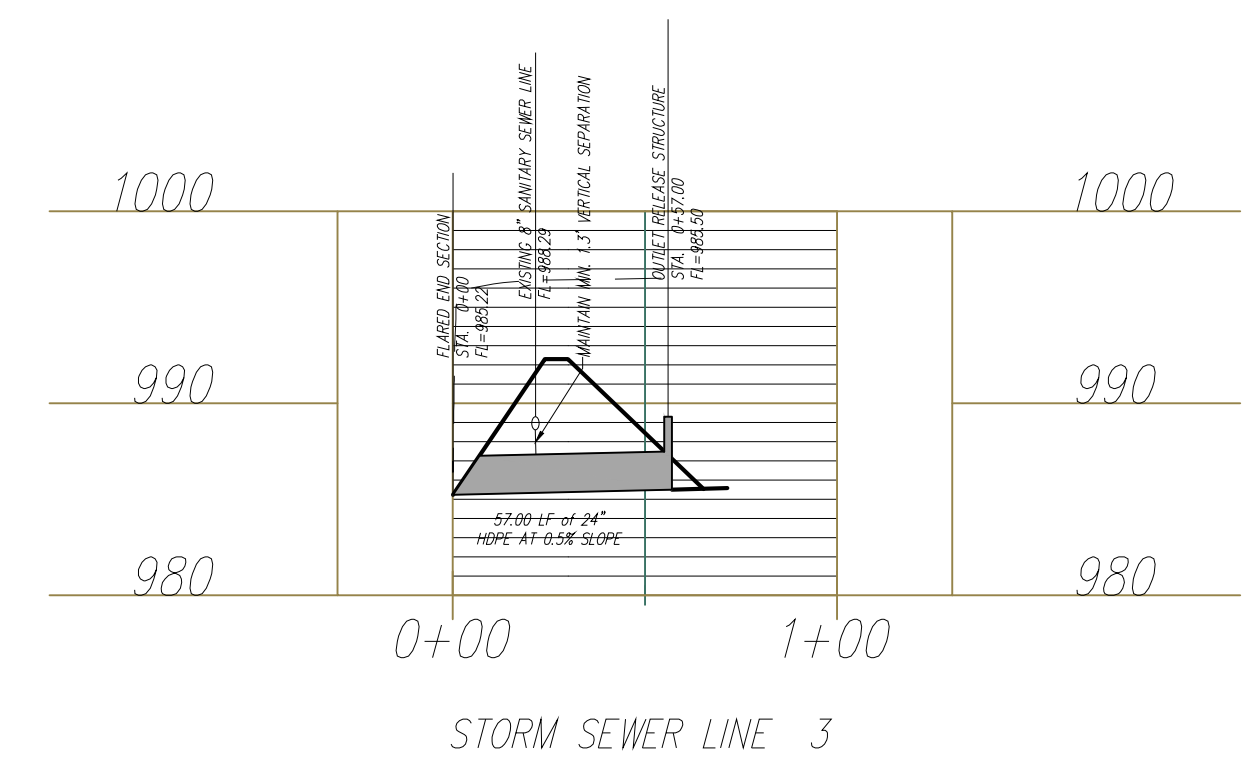
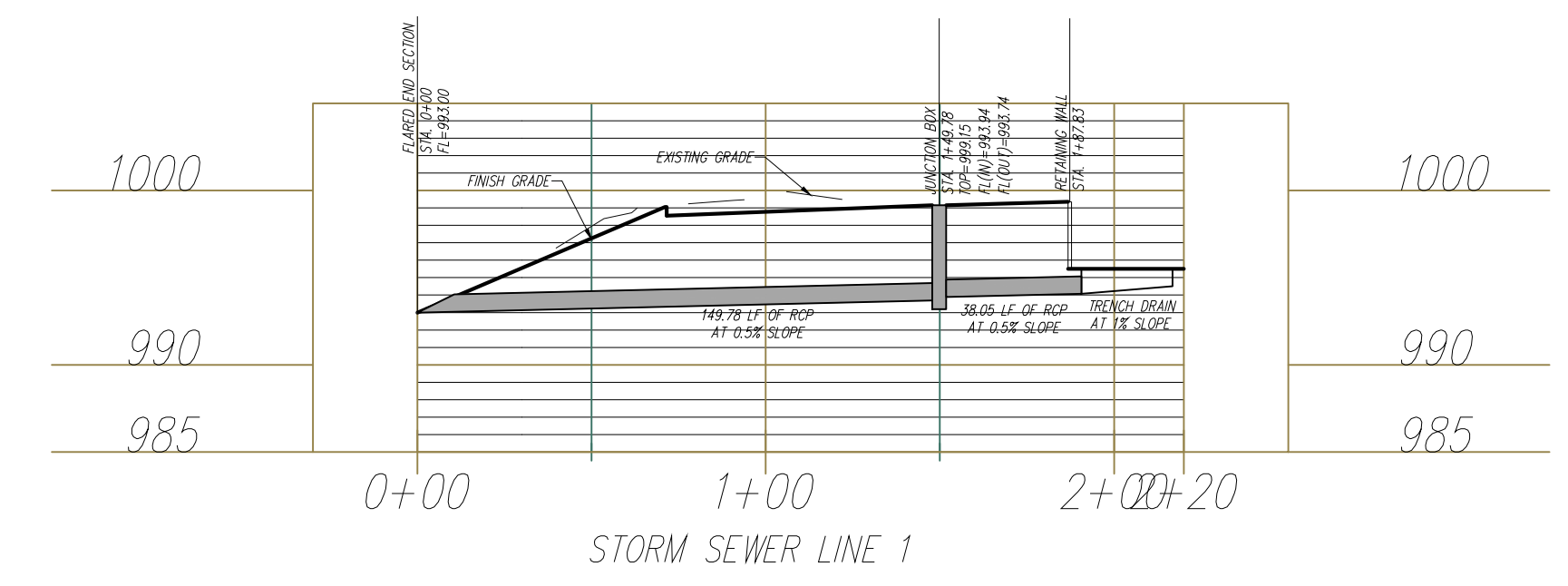
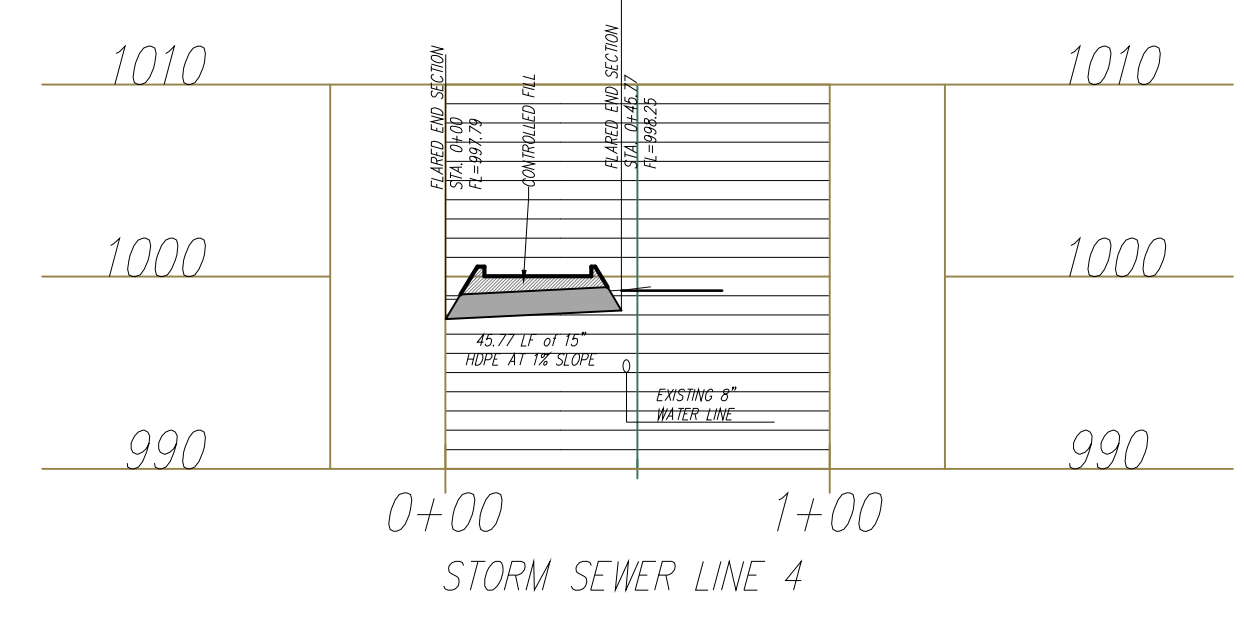
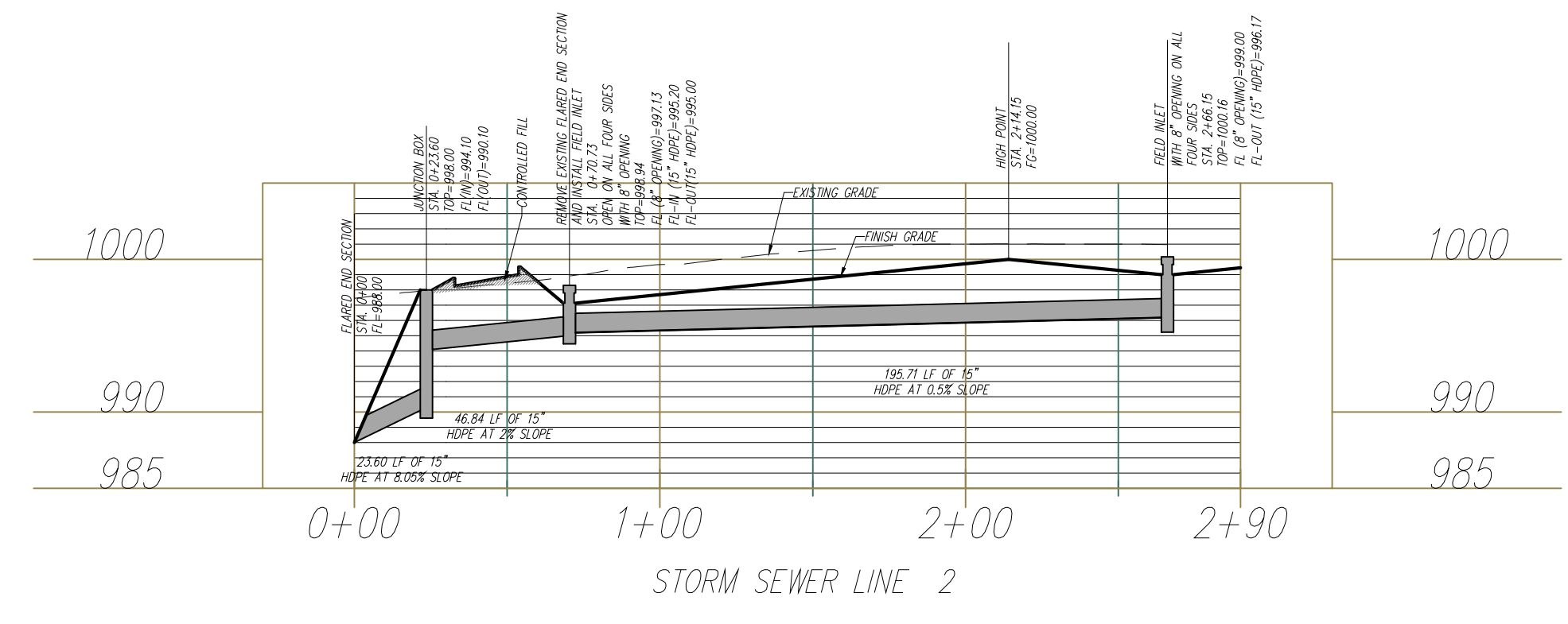
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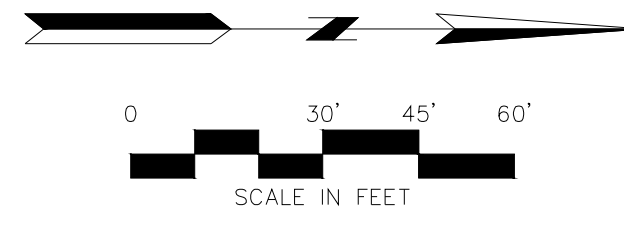


STORM SEWER PLAN
LINE 1, LINE 2, LINE 3, LINE 4 AND LINE 5
HIGH TECH SOLUTIONS
LEES SUMMIT - JACKSON COUNTY - MISSOURI

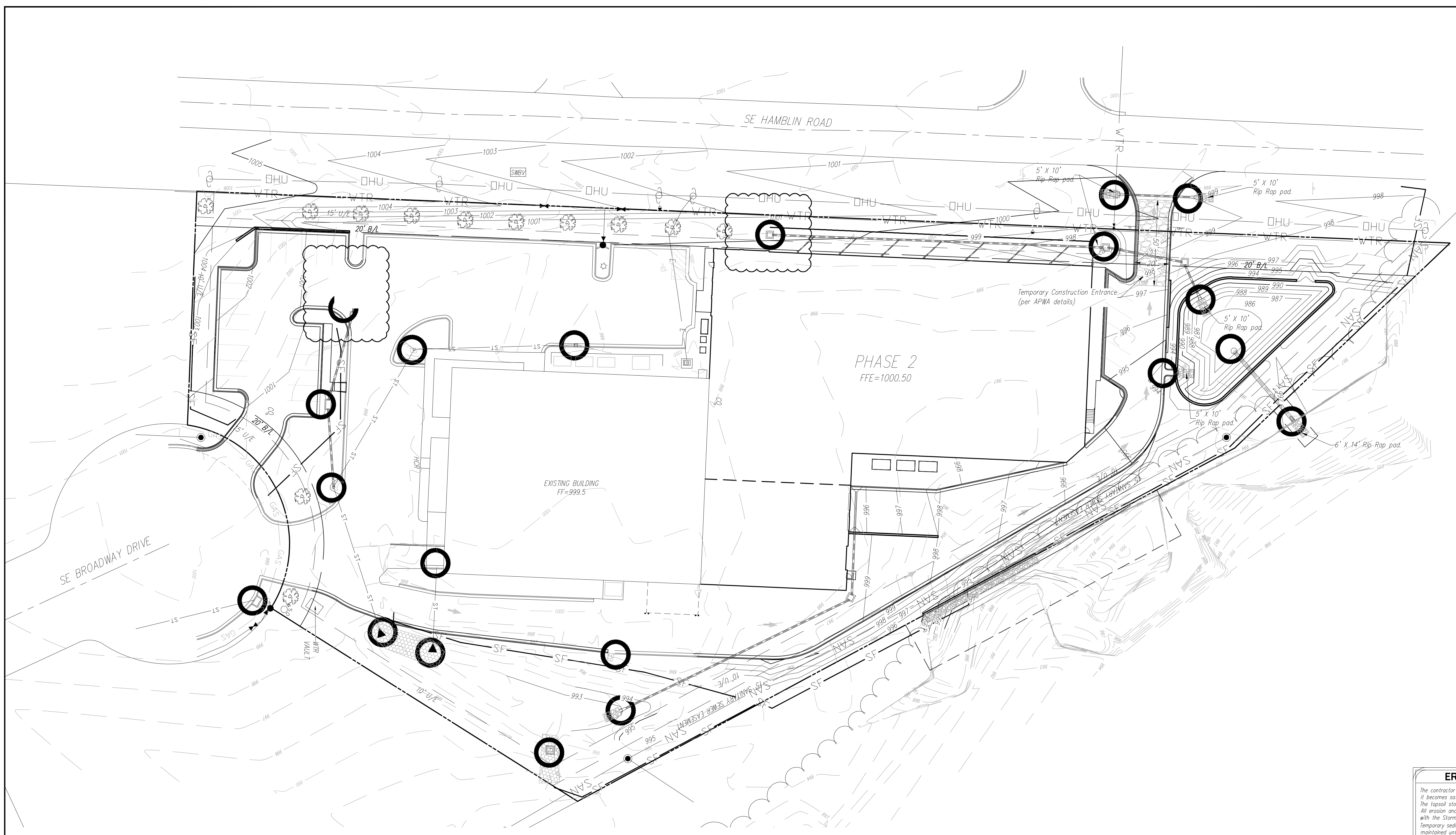
| | |
|-------------|------------------|
| X-REF NO. | 181.508 |
| DRAWING NO. | 1806.3 |
| DATE | OCTOBER 12, 2018 |
| JOB NO. | 1806.3 |

5 SHEET OF 11





Know what's below.
Call before you dig.



Area of Disturbance: 2.63 AC

| PROPOSED | KEY | EXISTING |
|----------|-------------------------|----------|
| 979 | Grades | 960 |
| SF | Proposed Silt Fence | |
| ○ | Inlet/Outlet protection | |

PROJECT BENCHMARK:
 #1 Top of Sanitary Manhole lid at south side of site on SE Broadway cul-de-sac.
 N: 992422.0300
 E: 2829012.5430
 TOP ELEV. 1001.50

EROSION CONTROL GENERAL NOTES:

The contractor shall inspect, repair and add stone to the stone construction entrance when it becomes saturated with mud to insure it functions as it was intended. The topsoil stockpile shall be graded to drain and seeded with a temporary seed mix. All erosion and sediment control devices shall be inspected, cleaned repaired in accordance with the Storm Water Pollution Prevention Plan. Temporary sediment control measures (silt fence, construction entrance, etc.) shall be maintained until all contributing areas are graded and stabilized. A complete plan for maintenance of control devices is contained within the Storm Water Pollution Prevention Plan which is part of the site work specifications. Dust control on site shall be minimized by spraying water on dry areas of the site. The use of oils and other petroleum based or toxic liquids for dust suppression is strictly prohibited. If the majority of mud or dirt is not removed from exiting traffic, contractor shall establish vehicle wash areas at construction traffic exit points and vehicle operation shall be intercepted and trapped before wash water is allowed to be discharged offsite. rinse-off will not be allowed outside the project construction limits. Repair eroded areas immediately, reseed as necessary to maintain good vegetative cover, mow vegetative cover to maintain a maximum height of six inches, and remove trash as needed.

Inspect and repair the collection system (i.e. catch basins, piping, swales, rip rap, etc.) after significant rainfall to maintain proper functioning.

All existing structures, fencing, trees, etc. within the construction area shall be removed and disposed of off site per state and local ordinances. any burning on site shall be subject to local ordinances.

All wash water (concrete truck, vehicle cleaning, equipment cleaning, etc.) shall be discharged from the site.

All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately.

Contractor shall remove all temporary erosion control devices/ditches and dispose of per local codes once the site has been stabilized. Contractor shall refer to the grading plan for final grades.

Land disturbing activities shall not commence until approval to do so has been received by governing authorities.

The general contractor shall strictly adhere to the SWPPP during construction operations. No land clearing or grading shall begin until all erosion control measures have been installed.

All exposed areas shall be seeded as specified within 14 days of final grading. Should construction stop for longer than 14 days, the site shall be seeded as specified. After every significant runoff producing rainfall event of 1/2" or greater and at least once a week:

A. Inspect the detention basin system for sediment accumulation, erosion, trash accumulation, vegetated cover, and general condition.
 B. Check and clear the outfall device of any obstructions.

This plan shall not be considered all inclusive as the general contractor shall take all necessary precautions to prevent soil sediment from leaving the site. General Contractor shall comply with all State and Local ordinances that apply. Additional erosion and sediment control measures will be installed if deemed necessary by on site inspection.

If installation of storm drainage system should be interrupted by weather or nighttime, the pipe ends shall be covered with filter fabric.

General Contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.

Additional erosion and siltation control methods and devices may be required as directed by the City or MoDNR.

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| 4 | EDH | 12/10/19 | Construction revisions |



12/4/19
Consult Inc
 engineers
 planners
 CORPORATE LICENSE No. E2010005873

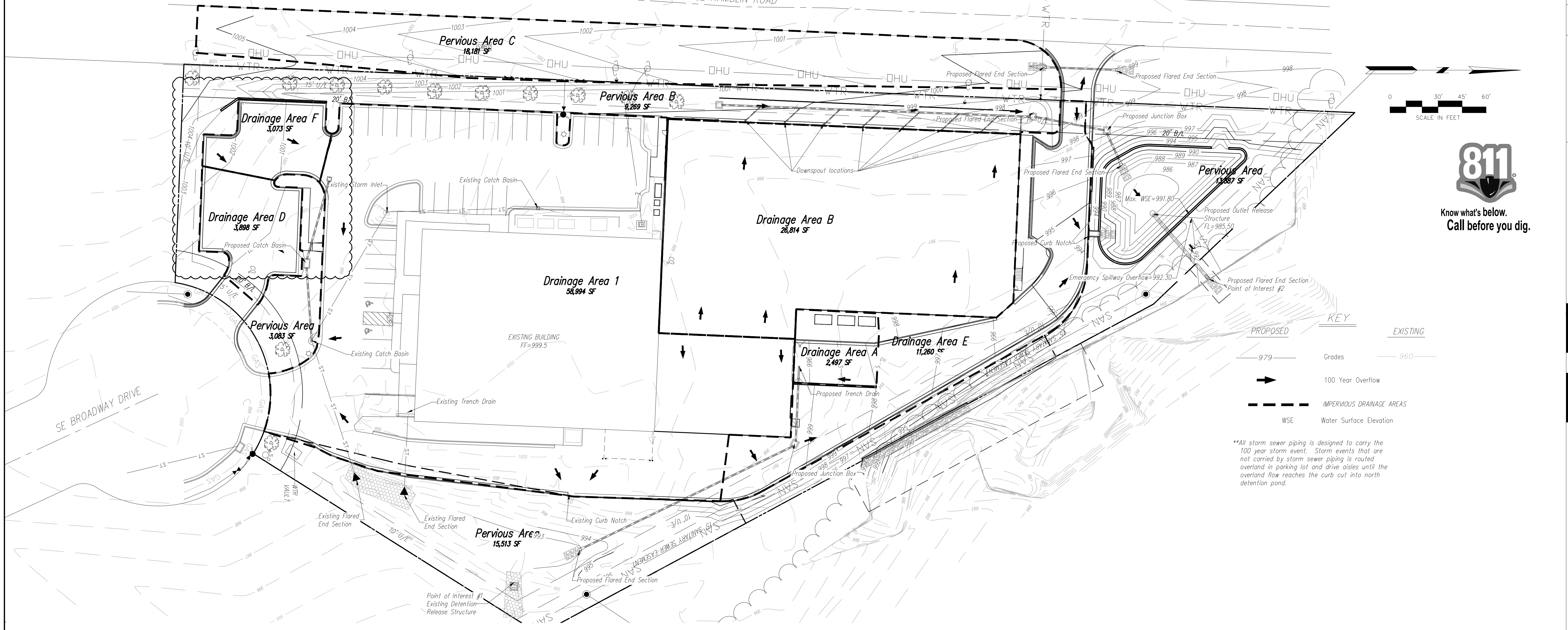
EROSION CONTROL PLAN
 HIGH TECH SOLUTIONS
 LEES SUMMIT - JACKSON COUNTY - MISSOURI

| |
|--------------------------|
| X-REF NO. 181308 |
| DRAWING NO. 18063 |
| DATE OCTOBER 12, 2018 |
| JOB NO. 18063 |
| 6 SHEET OF 11 |

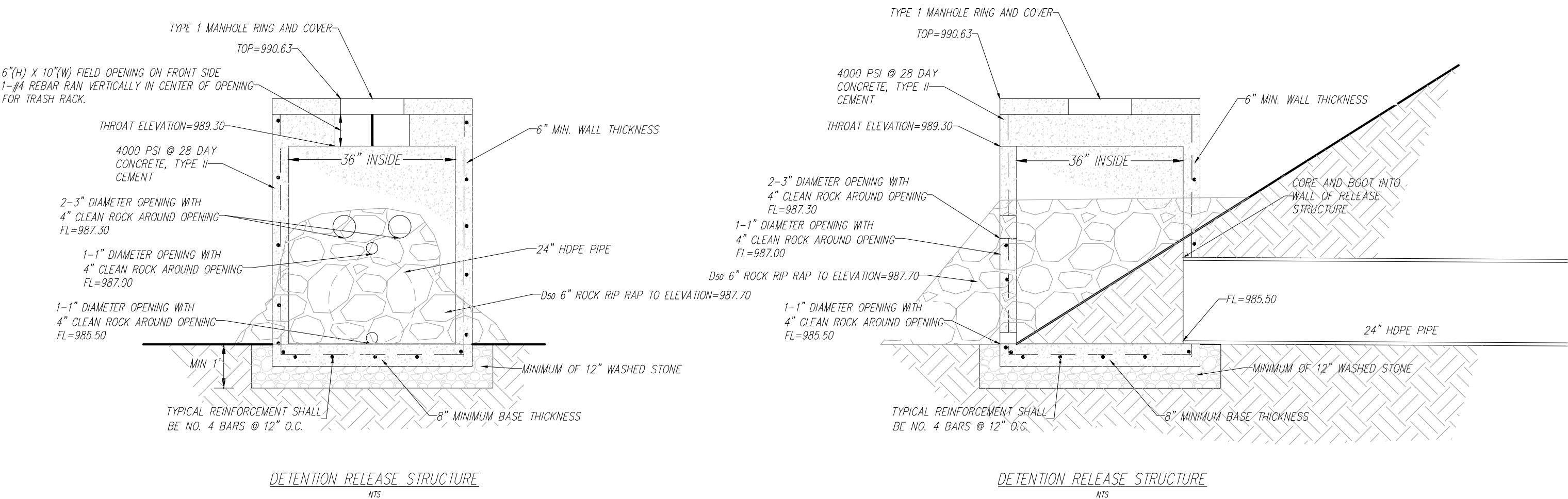
STORM SEWER CALCULATIONS

HT SOLUTIONS

| STORM SEWER NO. | SEWER LOCATION | | TRIBUTARY AREA (AC.) | | COMPOSITE RUNOFF COEFFICIENT | TIME OF FLOW | | | 10 YEAR DESIGN | | | | 100 YEAR DESIGN | | | | CURB INLET | | PIPE DESIGN | | | | | | | | | | |
|-----------------|--------------------|----------------------|----------------------|-------|------------------------------|----------------|----------------|----------------|---------------------------|--------------|------------------------|------------------|----------------------------|--------------|-------------|------------------------|--------------------------|-------------------|----------------|----------------|-----------|-----------------------|-----------------------|----------------------------|---------------------|-----------------|------------------|--------------|------|
| | FROM STRUCTURE NO. | TO STRUCTURE | AREA DESIGNATION | TOTAL | | T _i | T _t | T _c | INTENSITY [in/hr] [I(10)] | RUNOFF [cfs] | | | INTENSITY [in/hr] [I(100)] | RUNOFF [cfs] | | | In Pipe Downstream [cfs] | By Pass Out [cfs] | Pipe Size [in] | Pipe Slope [%] | Pipe Type | Rough Coeff [MANNING] | Design Velocity [fps] | Depth Flow (inches) Q[100] | Full Velocity [fps] | Full Flow [cfs] | | | |
| | | | | | | | | | | AREA Q[10] | In Pipe Upstream (cfs) | By Pass In (cfs) | | Total Q[10] | AREA Q[100] | In Pipe Upstream (cfs) | | | | | | | | | | | By Pass In (cfs) | TOTAL Q[100] | |
| LINE 1 | TRENCH DRAIN | JB | A | 0.05 | 0.05 | 0.90 | 5.0 | 0.0 | 5.0 | 7.35 | 0.3 | 0.0 | 0.0 | 0.3 | 10.32 | 0.6 | 0.0 | 0.0 | 0.6 | 0.6 | 0.0 | 12 | 0.50 | HDPE | 0.011 | 3.2 | 7.9 | 3.8 | 3.0 |
| LINE 1 | JB | FES | - | 0.00 | 0.05 | 0.00 | 0.0 | 0.0 | 0.0 | 7.35 | 0.0 | 0.3 | 0.0 | 0.3 | 10.32 | 0.0 | 0.6 | 0.0 | 0.6 | 0.6 | 0.0 | 12 | 0.50 | HDPE | 0.011 | 3.2 | 6.5 | 3.8 | 3.0 |
| LINE 2 | FIELD INLET | FIELD INLET | F | 0.17 | 0.22 | 0.20 | 5.0 | 0.0 | 5.0 | 7.35 | 0.2 | 0.0 | 0.0 | 0.2 | 10.32 | 0.4 | 0.0 | 0.0 | 0.4 | 0.4 | 0.0 | 15 | 2.00 | HDPE | 0.011 | 1.4 | 2.3 | 3.0 | 11.6 |
| LINE 2 | FIELD INLET | JB | B&G | 0.79 | 1.01 | 0.79 | 5.0 | 0.0 | 5.0 | 7.35 | 4.6 | 0.2 | 0.0 | 4.8 | 10.32 | 8.1 | 0.4 | 0.0 | 8.5 | 8.5 | 0.0 | 15 | 2.00 | HDPE | 0.011 | 2.6 | 6.9 | 3.0 | 11.6 |
| LINE 2 | JB | FES | - | 0.00 | 1.01 | 0.00 | 0.0 | 0.0 | 0.0 | 7.35 | 0.0 | 0.0 | 0.0 | 0.0 | 10.32 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15 | 9.40 | HDPE | 0.011 | 8.4 | 7.0 | 9.6 | 11.6 |
| LINE 3 | OUTLET | FES | - | 0.00 | 1.01 | 0.00 | - | - | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15 | 0.50 | HDPE | 0.011 | 10.6 | 5.1 | 1.5 | 11.6 |
| LINE 4 | FES | FES | C | 0.41 | 1.42 | 0.20 | 5.0 | 0.0 | 5.0 | 7.35 | 0.6 | 0.0 | 0.0 | 0.6 | 10.32 | 1.1 | 0.0 | 0.0 | 1.1 | 1.1 | 0.0 | 15 | 1.00 | HDPE | 0.011 | 5.6 | 2.4 | 6.2 | 7.6 |
| LINE 5 | DI | CB | F | 0.07 | 1.49 | 0.90 | 5.0 | 0.0 | 5.0 | 7.35 | 0.5 | 0.6 | 0.0 | 0.6 | 10.32 | 0.8 | 0.0 | 0.0 | 0.8 | 0.8 | 0.0 | 12 | 1.00 | HDPE | 0.011 | 1.3 | 3.6 | 1.8 | 4.5 |
| LINE 5 | CB | 2x CB | D | 0.60 | 1.58 | 0.90 | 5.0 | 0.0 | 5.0 | 7.35 | 0.6 | 0.6 | 0.0 | 0.6 | 10.32 | 1.0 | 0.0 | 0.0 | 1.9 | 1.9 | 0.0 | 12 | 6.26 | HDPE | 0.011 | 1.1 | 3.0 | 4.6 | 11.3 |
| - | FLUME | NORTH DETENTION POND | E | 0.26 | 1.84 | 0.90 | 5.0 | 0.0 | 5.0 | 7.35 | 1.7 | NA | NA | 1.7 | 10.32 | 2.7 | NA | NA | 2.7 | NA | NA | NA | NA | NA | NA | 1.8 | 3.0 | 1.8 | 2.7 |



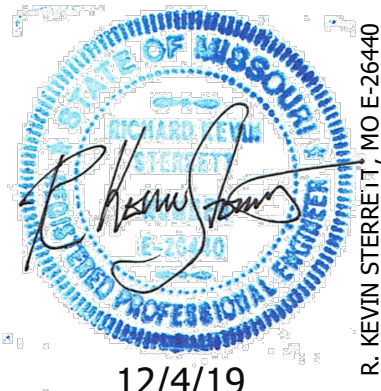
PROJECT BENCHMARK:
 #1 Top of Sanitary Manhole lid at south side of site on SE Broadway cul-de-sac. N: 992422.0300 E: 2829012.5430 TOP ELEV. 1001.50



Detention Pond Details:

| Elevation (feet) | Surt Area (sq-ft) | Cum.Store (cubic-feet) |
|------------------|-------------------|------------------------|
| 985.500 | 1.50 | 0 |
| 986.000 | 1,148.80 | 287.58 |
| 987.000 | 1,759.34 | 1443.27 |
| 988.000 | 2,253.05 | 3747.84 |
| 989.000 | 2,800.89 | 6274.81 |
| 990.000 | 3,400.19 | 9375.35 |
| 991.000 | 4,050.51 | 13100.70 |
| 992.000 | 4,066.36 | 17159.13 |
| 993.000 | 4,306.85 | 21345.74 |

| NO. | BY | DATE | REVISION |
|-----|-----|----------|---|
| 1 | EDH | 1/20/19 | Revised per city comments dated 1/20/19 |
| 2 | EDH | 4/24/19 | Revised per city comments dated 4/16/19 |
| 4 | EDH | 12/10/19 | Construction revisions |



12/4/19

Consult Inc
engineers
planners

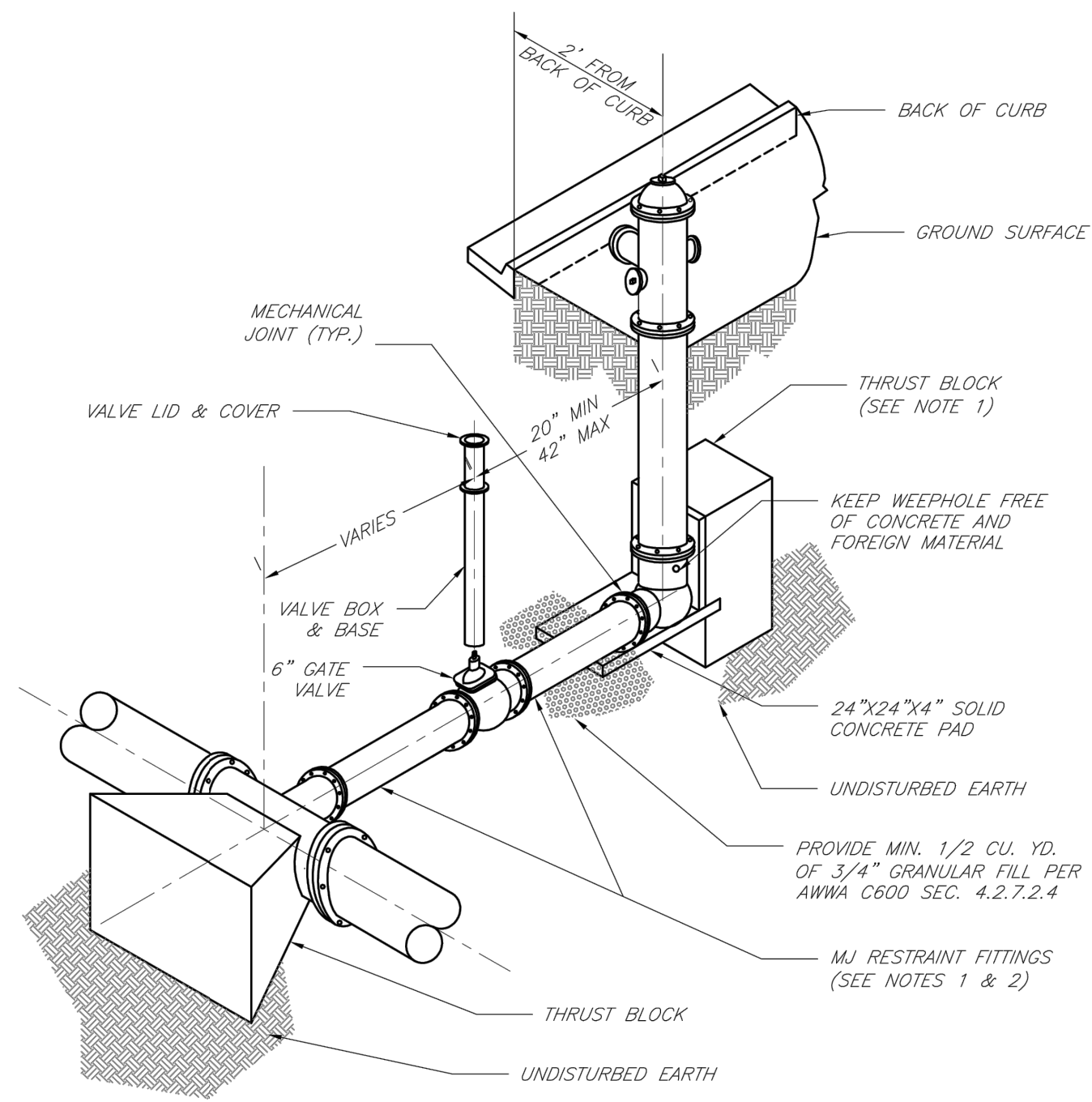
811

POST DEVELOPMENT DRAINAGE AREA MAP

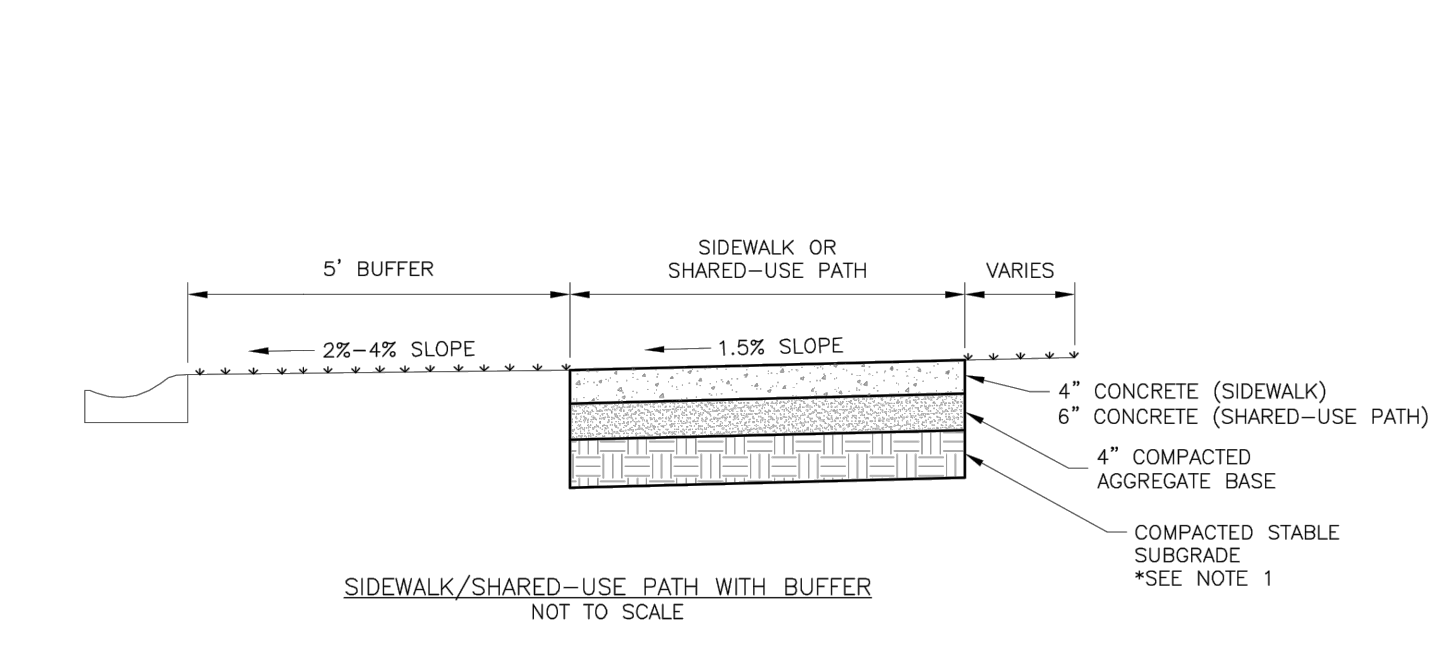
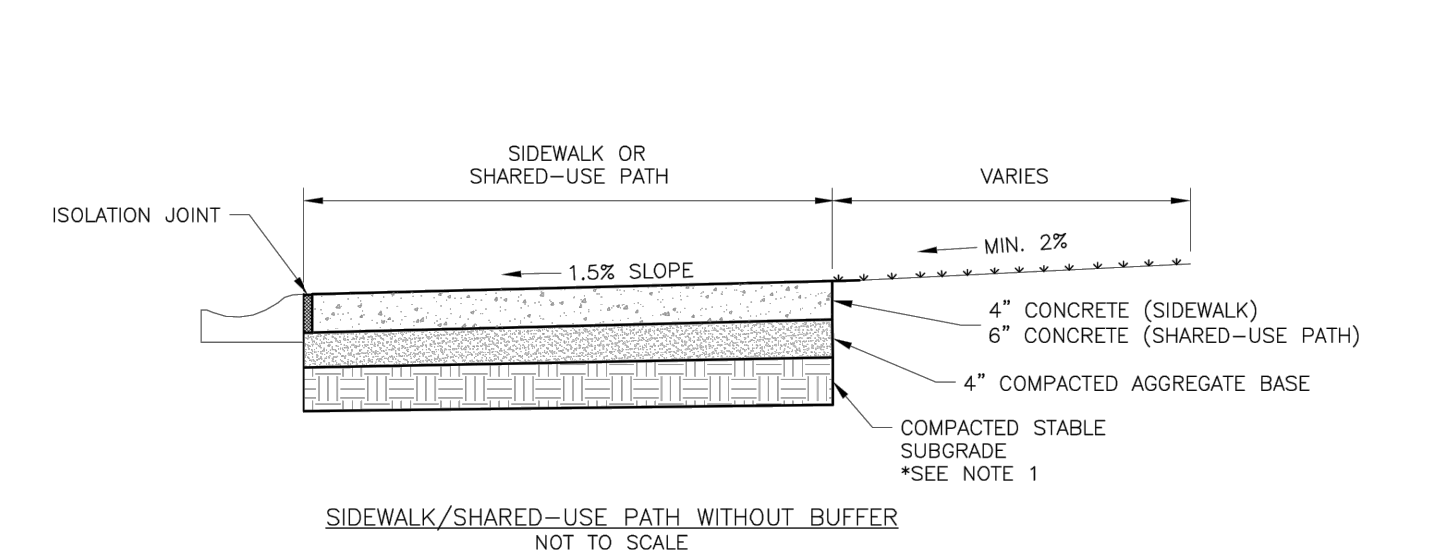
HIGH TECH SOLUTIONS

LEES SUMMIT - JACKSON COUNTY - MISSOURI

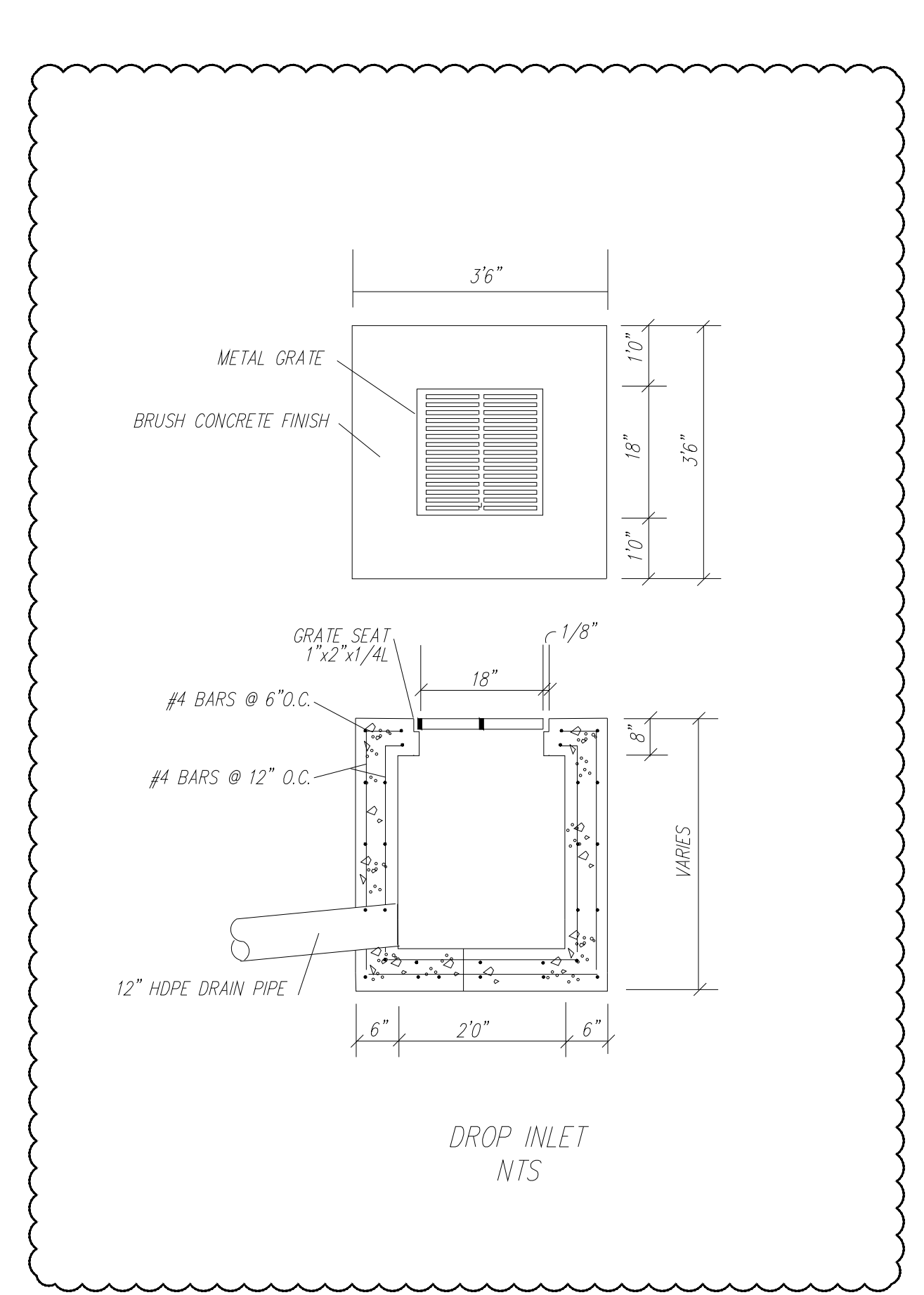
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| X-REF NO. 181308 | DRAWING NO. 1806.3 |
| DATE OCTOBER 12, 2018 | JOB NO. 1806.3 |
| 8 | 11 |



- NOTES:**
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
 4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
 5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
 6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.



- GENERAL NOTES:**
1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
 3. KCMMS 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS AND SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
 4. ALL SIDEWALKS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
 5. AN EXPANSION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK, BUT NO GREATER THAN 10 FT.
 6. SHARED-USE PATH WIDTH SHALL BE 10 FT. WIDE.
 7. SIDEWALK FINISHING (NO PICTURE FRAMING) AS DIRECTED BY CITY INSPECTOR.
 8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.



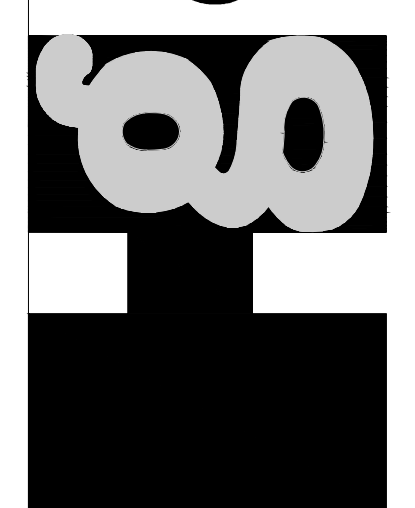
| | | |
|-------------------------------------|--|----------------|
| LS | LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 | Date: 02/13 |
| | | Drawn By: JN |
| LS | LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 | Checked By: DL |
| | | File: 1847-7 |
| HYDRANT INSTALLATION - STRAIGHT SET | | Rev: 1/14 |
| | | Rev: |

| | | |
|---------------------------------|--|----------------|
| LS | LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 | Date: 04/17 |
| | | Drawn By: MIF |
| LS | LEE'S SUMMIT MISSOURI PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 | Checked By: DL |
| | | File: 1847-7 |
| SIDEWALK/SHARED-USE PATH DETAIL | | GEN-2 |
| | | Rev: |

| NO. | BY | DATE | REVISION |
|-----|-----|----------|------------------------|
| 4 | EDH | 11/27/19 | Construction revisions |
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R. KEVIN STERRETT, NO. E-26440
CORPORATE LICENSE NO. E201005873

Consult Inc
engineers planners



SITE DETAIL SHEET

HIGH TECH SOLUTIONS
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

| |
|---------------------------------------|
| X-REF NO. 181.508 |
| DRAWING NO. 1806.3 |
| DATE OCTOBER 12, 2018 |
| JOB NO. 1806.3 |
| 11 SHEET OF 11 |