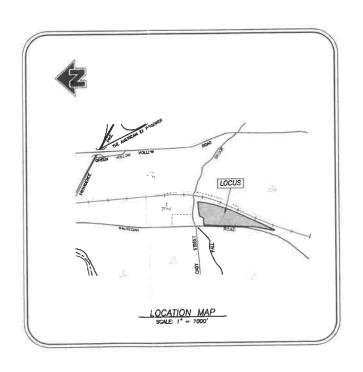
PROPOSED GRAVEL EXCAVATION

120 WAUREGAN ROAD (ROUTE 12) KILLINGLY, CONNECTICUT

JOLLEY COMMONS, LLC.

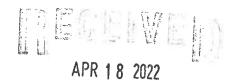
LEGEND

0	IRON PIN FOUND
⊡	CHD MONUMENT FOUND
□ CHD	CHD MONUMENT POINT
□св	CATCH BASIN
4	SIGN
-(© -⊔-	LIGHT POLE
o GG	GAS GATE
O MH	MANHOLE
⊙ SMH	SANITARY SEWER MANHOL
0	BOLLARD
ø	UTILITY POLE
	EXISTING CONTOURS
100	PROPOSED CONTOURS
#	INLAND WETLANDS FLAG
—— B ——	BUILDING SETBACK LINE
	METAL BEAM GUIDE RAIL
	OVERHEAD WIRES
~~~~~	STONE WALL
$\infty$	STONE WALL REMAINS
	SILT FENCE



# INDEX TO DRAWINGS

TITLE	SI	EET	. 1
COVER SHEET	1	OF	6
EXISTING CONDITIONS PLAN	2	0F	6
PHASE 1 EXCAVATION PLAN	3	OF	6
FINAL EXCAVATION PLAN	4	OF	6
SIGHTLINE DEMONSTRATION PLAN	5	OF	6
DETAIL SHEET	6	OF	6



PLANNING & ZONING DEPT. TOWN OF KILLINGLY

PREPARED BY:

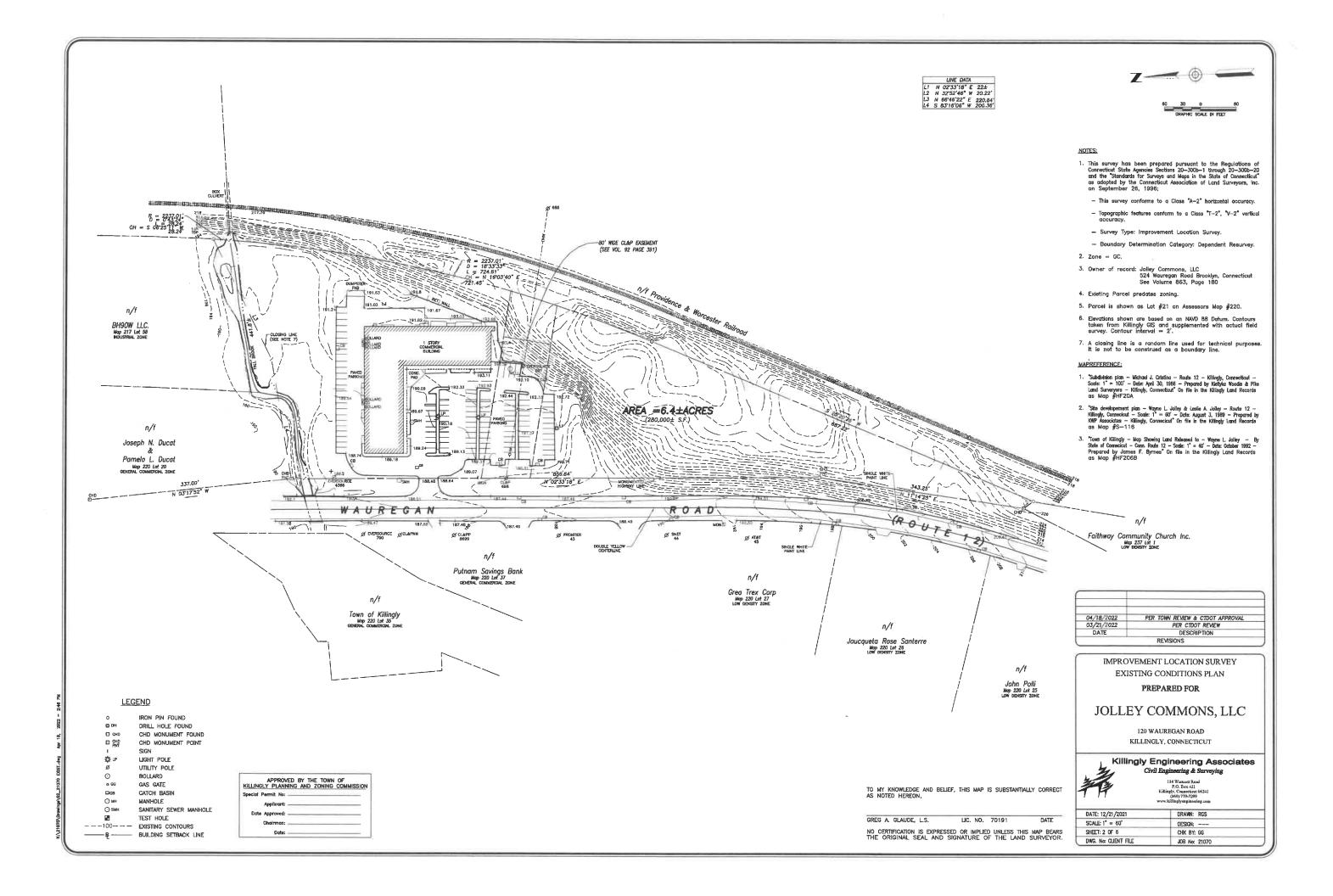


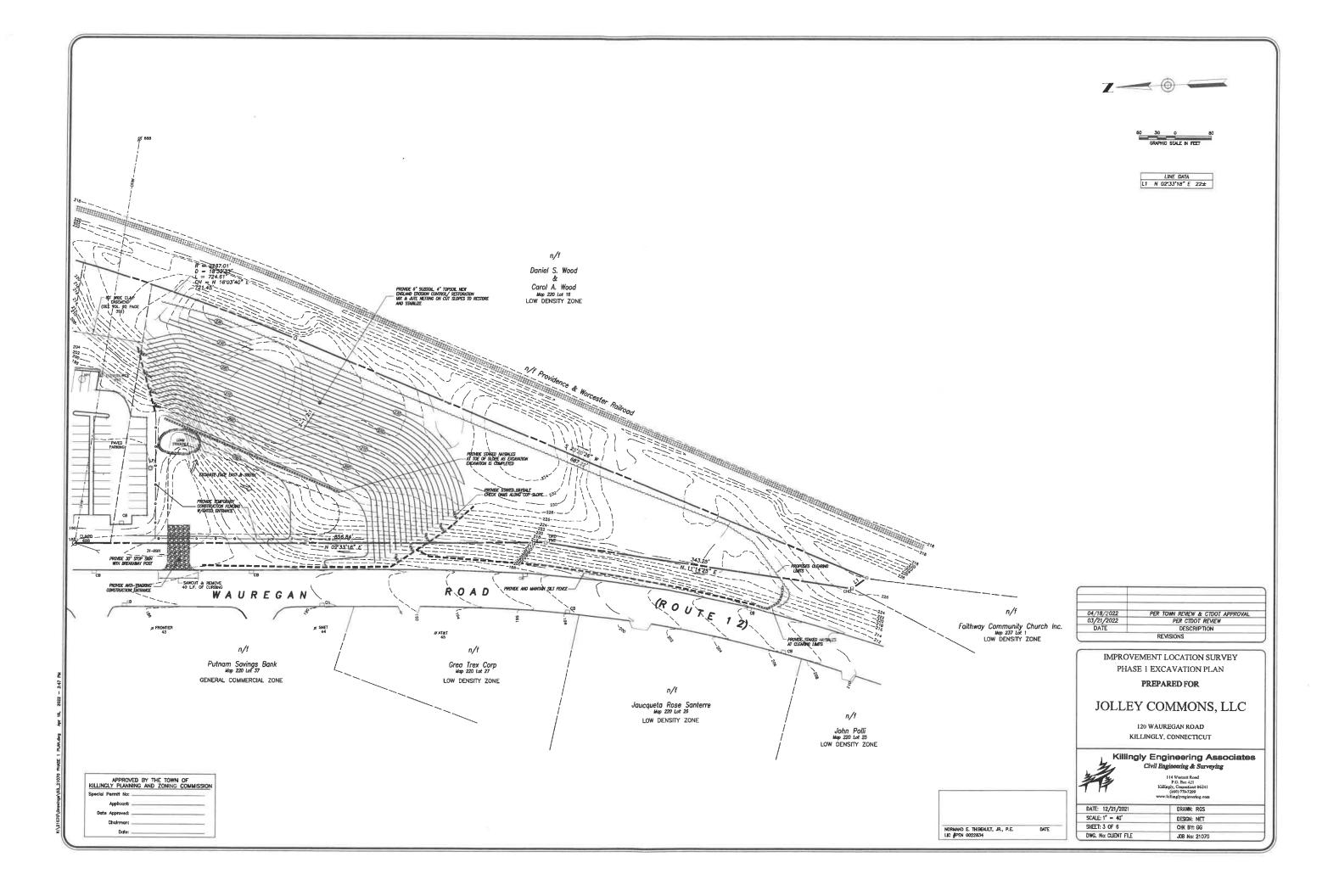
December 2021

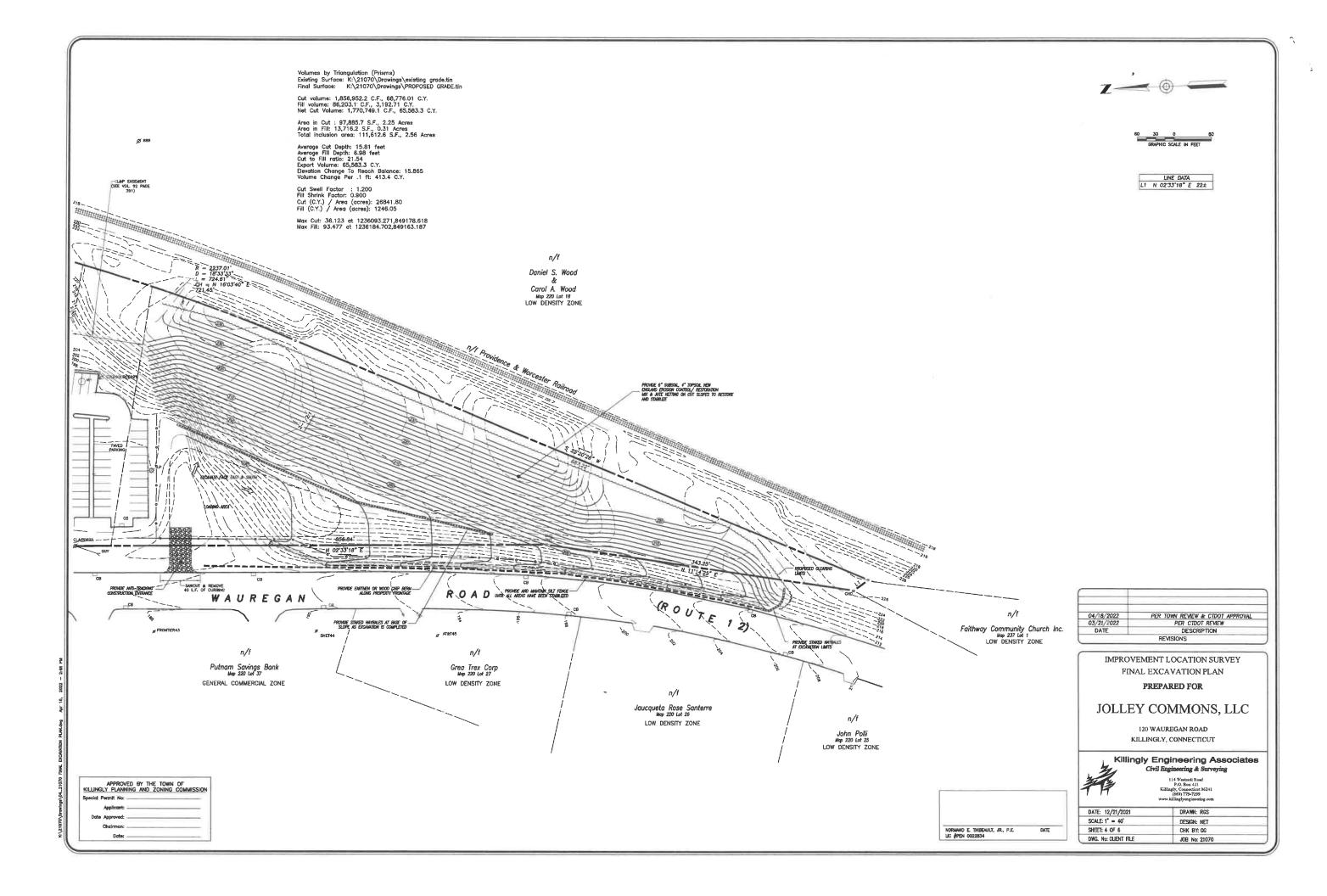
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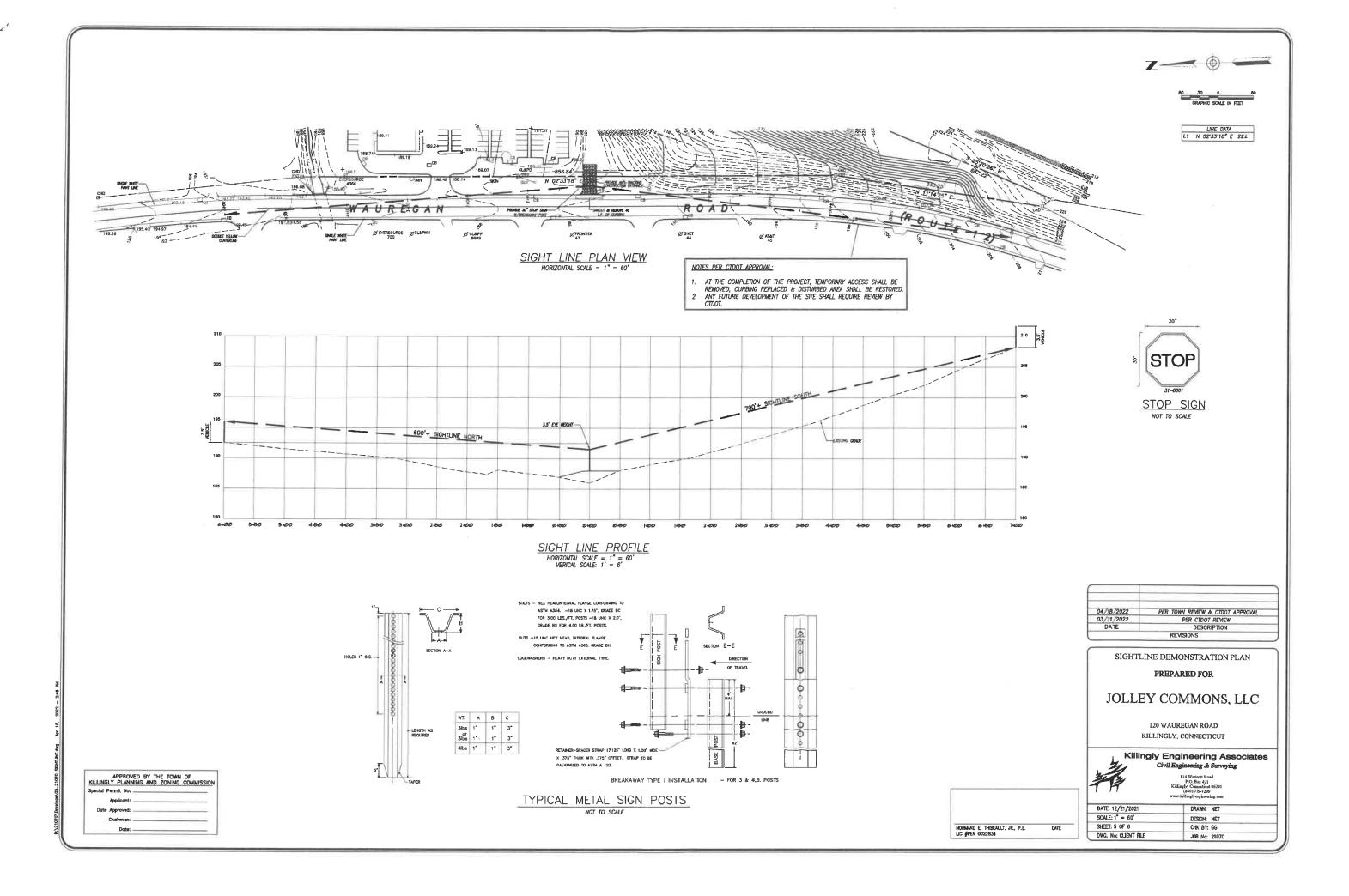
SHEET 1 OF 6

APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION
Special Permit No:
Applicant:
Data Approved:
Chairman:









1ISDA-NRCS Web Soil Supp

2. Soil Survey of New London County Connecticut, U.S.D.A. Soil Conservation Service 1983.

The proposed site is comprised mainly of two soil types; Hincidey "HkC" and Windsor Loamy Sand "WvA"

HkC--Kinckley gravely sandy loam, 3 to 15 percent elopes. This is a gently sloping to sloping, excessively drained soil on terraces of stream valleys and on glacial outweah plains. The areas this soil are oval or irregular in shape and range from 5 to 200 acres. Slopes are convex or undulating and are are mostly less than 200 feet long.

WvA-Windsor Loamy Sand, 0 to 3% slopes. This nearly level excessively drained soil is on stream terroces and outwest plains. Mapped areas are dominantly irregular in shape and moetly 2 to 20 acres in area.

# DEVELOPMENT SCHEDULE:

- . Prior to any work on site, the limits of operations shall be clearly flagged in the field by a Land Surveyor, licensed in the State of Connectant. Once the limits are flagged, they shall be reviewed an approved by an agent of the Town.
- 2. Install and maintain erosion and sedimentation control devices as shown on these plans. All erosion control devices shall be inspected by an agent of the Town. Any additional erosion control devices required by the Town's Agent shall be installed and inspected prior to any construction on site. (See sit fence installation notes.)
- 5. Install anti trackina surface.
- 4. Install and maintain erosion and sedimentation controls throughout operations.

## SPILL PREVENTION:

The Owner shall prevent oily and other hazardous substances from spilling on the ground, leaching into the sail or migrating into wetlands or water bodies.

- . All fueling shall take place within the designated fueling area as shown on the plans, adjacent to the site entrance and within the construction staging area. All fueling and minor maintenance shall be confined to this area. Mejor equipment repairs shall be conducted off site.
- 2. If required, temporary fuel tonks shall be located at the designated fueling area. Manufactured double walled storage tonks shall be installed, operated and maintained per the manufacturer's written recommendations. Single welled temporary tonks shall only be utilized if 100% spillage containment is provided. In the event of fuel spillage, the operator shall immediately remove the tank, contain the spillage and contact the CIDP 24—hour Emergency Spill Response line of 1—868—337—745.
- i. Fuel trucks entaring the site shall shall proceed directly to the designated fueling area prior to dispersing any fuel products.
- b. An emergency spill left shall be located at the designated fueling area and shall consist of obsorbents, sand bags or earth moterial for use in controlling spills or leaks. Spilled materials and/or contaminated soils shall be excovated, stored in leaf-proof containers and from the site for disposal in accordance with all applicable local, stote and federal fazerdous waste regulations.

# DEVELOPMENT CONTROL PLAN:

- Development of the site will be performed by the applicant, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout operations.
- the cover's the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied. SILT FENCE INSTALLATION AND MAINTENANCE:
- . Dig a 6" deep trench on the uphill side of the barrier location.
- t. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
- 3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
- Inspect and repair barrier after heavy rainfall,
- Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
- 5. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or hat the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands comprisein.
- Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
  the fance has been overfopped, underruit or bypassed by runoff water,
  the fence has been moved out of position (knocked over), or
  the geotattile has decomposed or been demaged.

- . Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other. 5. Each bale shall be securely anchored with at least 2 stakes and gape between bales shall be wedged with straw to prevent water from passing between the bales.
- Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
- Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the inland Wetlands Commission.
- 5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:

   the barrier has been vertopped, undorator or bypassed by runoff water,
   the barrier has been moved out of position, or
   the hoy bafes have deteriorated or been damaged.

# TEMPORARY VEGETATIVE COVER:

# SEED SELECTION

TIMBNG CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

# RECOMMENDED TEMPORARY SEED MIXTURES:

APPROVED BY THE TOWN OF KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No: _

Date Approved:

Date: _

No.	Seed Mixture (Variety)	Lbs/ocre	Libs/Sq. Ft
*26	Switchgrass (Blackwell, Shelter, Cave-in-rock)	4.0	0.10
	Big Bluestern (Niagra, Kow)	4.0	0.10
	Little Bluestern (Blaze, Aldous, Camper)	2.0	0.05
	Sand Lovegrass (NE-27, Bend)	1.5	0.03
	Bird's-foot Trefoil (Empire, Viking)	2.0	0.05
**27	Flatpeg (Lathoo)		
	Perennial Peg (Lancer)	10	0.20
	Crown Vetch (Chemung, Penngift)	2.0	0.05
		10	0.20
	Tall Feacue (Kentucky 31)	2.0	0.05
**2B	Orchardgrass (Penniatte, Kay, Potomac)	5.0	0.10
	Tall Fescue (Kentucky 31)		
	Redtop (Streeker, Common)	10	0.20
	Bird's-foot Trefoil (Empire, Viking)	2.0	0.05
	bird e-root treroil (Empire, Yilding)	5.0	0.10
	ered to be a cool season mix fered to be a warm season mix		

Loosen the soil to a depth of 3-4 inches eith a slightly rougheered surface. If the area has been recently bosened or disturbed, no further rougheeining is required. He harmoning, relating a required with harmoning, relating or drapping with a section of chanila list faces. Avoid accessation composition of the auritors by equipment threeling book and furth over the surface. If the slade is trouised, but note marks shall be perpendicular to the ordicipated with the contract and the perpendicular to the ordicipated with the contract and the perpendicular to the ordicipated with the contract and the perpendicular to the ordicipated and the contract and the perpendicular to the ordicipated with the contract and the

femporary seedings made during optimum seeding dates shall be mulched the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 95%−100%

inspect seeded grea at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and ill sends.

Where seed has moved or where soil erosion has occurred, determine the equas of the failure. Rapair eroded areas and install additional controls if required to present procurations of erosion.

Seed min for siops restoration shall be <u>good mintures</u> \$28, \$27 or \$28 os described in the 2002 Cuidelines for Soil Erusion and Sediment Control and as described on this sier, applied at the recommended rates. In general, the following sequence of operations shall apply:

- No topsoil or subsoil shall be removed from the sits. All topsoil and subsoil shall be stockpled and stabilized in accordance with measures outlined in "removary toestative Cover".
- Apply agricultural ground litrastons at a rate of 2 tone per acre or 100 lbs. per 1000 a.f. Apply 10-10-10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1000 a.f. Work lime and fertilizer into the soil to a minimum soil depth of 4".
- Apply the recommended grass seed rnb. The recommended seeding dates are: April 1 to June 15 & August 15 October 1.
- Following seeding, firm seedbed. Seeded stopes shall be etablized with turf reinforcement matting, tacked in place per recommendations of the manufacture and as shown on the detail, this sheet.
- If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as petting or organic mulch.
- Slopes shall be inspected weekly and after all rain events of 0.5" or greater. Distributed or demonal slopes shall be residued immediately.

# EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erasion and sediment controls is to absorb erasional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eraded soil particles before they reach any sensitive area.

# KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential sersions. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phosing, sequencing and construction exhectaling are interralated. Phosing divides a large project into distinct sections where construction work over a specific rade occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction over all control to the section of t

- Limit areas of cleaning and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
- Route traffic patterns within the site to avoid existing or newly planted vegetation.
- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction.

  Ensure all outlets are stable before outletting storm drainage flow into them.
- Schedule construction so that final grading and stabilization is completed as soon as possible.

# SLOW THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of vater. The erosive energy of vater increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced inflitution rates caused by the removal of edeting vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

Clean runoff should be kept separated from sediment loden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off-site generated runoff with sediment loden runoff generated on-site until offer adequate filtration of mission with the control waters has occurred.

- Segregate construction waters from clean water
- Divert site runoff to keep it isolated from wetlands, waterco and drainage ways that flow through or near the devel until the sediment in that runoff is trapped or detained

# REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub-drainage beains within the site. By reducing sediment loading from within the site, by reducing sediment loading from within the site, the chance of perimeter control follows and the potential off-set damage that it can cause is reduced. It is generally more expensive to correct off-site damage than it is to install proper internal controls.

- rect runoff from email disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flow and increase settlement and filtering of sediments.

# EXCAVATION NOTES:

EXCAVATION QUANTITIES: SEE SHEET 3

HOURS OF OFFERION: 7:00 cm — 8:00 pm Mondey — Friday
8:00 cm — 12:00 pm Soturday
There shall be no excernation activities on Sundays and this following holidays: Christimas, New There shall be no excavate Year's Day, Memorial Day,

<u>DUST_CONTROL</u>: Dust control shall be accomplished with periodic watering. Other measures, if desired should be reviewed and approved by the Town of Killingly. IRLCK IRIPS: Two trucks will be utilized to transport earth materials from the site. It is anticipated that 4-6 brack loads per hour will travel to and from the site.

GENERAL NOTES: There shall be no starage of fuel on site nor shall there be vehicle or machinery washing or major repairs done on site.

Excovation shall generally be completed utilizing a downcutting method on the excavation face to maintain a self-contained active excavation area and prevent the migration of stormwater and sediment from the active excavation and. The cooses drive to the point of excavation shall be maintained in a stable condition. Additional clean gravel, povement millings or stone aggregate shall be installed as necessary.

 The maximum permitted finish grade alope of excavated areas shall be 2.5H:1V Jute or straw erosion control netting shall be used to stabilize these alopes if necessary — North American Green SC-150 or regineer approved equal. 8. Prior to any excavation, contact CALL BEFORE YOU DIG at 1-800-922-4455 to determine the location of any underground utilities.

- Prior to any ordivity on sits, the contractor shall flog the limit of clearing and schedule a pre-construction meeting with the Town of Killingly Zoning Official.

  Out trees within the clearing kint and remove wood from the sits. Install perimeter erusion and sedimentation contrade, branches/hussh may be chipped and utilized as bearms for EAS. Install and-to-change constructions environce. Excounts all stumps bloated in the work area and remove to a deposad sits or shookpile to brighted for use on sits. The state of Connectout does not allow for burying of stumps on
- sits. Construct access driveway and apply a gravel or povement, millings wearing surfaces. Strip and stockpile topsail and subsoil. Institled topsail executed as work commences shall be removed from the to create a work crea. Notes, surficient subsoil and topsail shall be reserved to strodde a minimum of 6" of subsoil and 4" of topsail to establish vegetation for finished create.

- Strip are source.

  Strip are source.

  Interview to provide a minimum of 6 of eubeni and 4 of topsou to secure to provide a minimum of 6 of eubeni and 4 of topsou to secure.

  Begin sourceton to premove grown industrial.

  Interview to the source grown industrial.

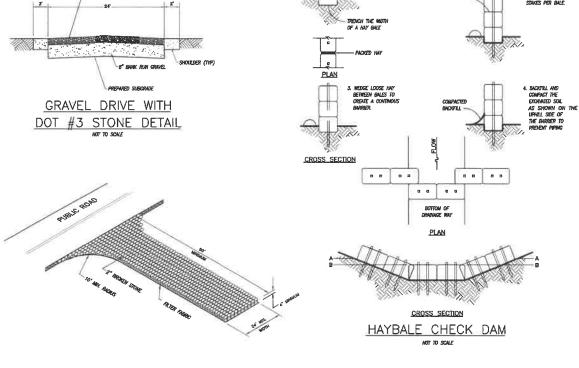
  Integrat perhaptive review and sedimentation controls weekly and other ruin svents greater than 1/2. Report evaluation such as required after inspections. Additional evaluation and sedimentation controls such as afteriors may be installed per direction of the Owner's of the second sedimentation controls such as afteriors may be installed per direction of the Owner's the second sedimentation controls such as a second to the recognition such as a public has been completed, apply subscipling typed and seed to progresses south. Apply that neiting over sedections are defined that controls the sedection of the owner's south apply that neiting over sedections.

  Control Restoration Mix (Final Seeding)

The New England Erasion Control/Restoration Mix For Dry Sites provides an appropriate selection of native and naturalized grasses to ensure that dry and recently disturbed sites will be quickly revegetated and the soil surface stabilized. It is an appropriate seed mix for road cuts, pipelines, steeper elopes, and areas requiring quick cover during the scotogloid restoration process. The mix may be spread by head, Lightly role, or roll to ensure proper soil—seed contact. Best results are obtained with a Spring or late Summer seeding, Luts Spring through Mid-Summer seeding, Luts Spring through Mid-Summer seeding utter to spring through Mid-Summer seeding utter the spring through Mid-Summer seeding utter the project of conserve moisture. If conditions are drive from usual, whatering will be required. Percitation is not required unless the soils are particularly infertile. Preparation of a clean weed free seed bed is necessary for optimal results.

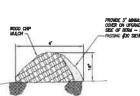
# APPLICATION RATE: 35 lb/scre | 1250 sq ft/lb

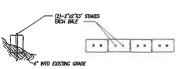
SPECIES: Cresping Red Fescue, (Festuca rubra), Canada Wild Rye, (Elymus canadensie), Annual Ryegrass, (Lollum multiflorum), Perenniel Ryegrass, (Lollum perenne), Blue Grama, (Buchtelous graciils), Little Bluestein, (Schizorhytium scoparium), Indian Grass, (Sorghastrum nutans), Rough Bentgrass, (Agroetis scabra), Upland Bentgrass, (Agroetis scabra), Upland Bentgrass, (Agroetis scabra), Upland Bentgrass, (Agroetis scabra),



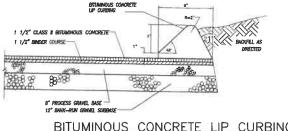
ANTI-TRACKING PAD

4° OF PAVEMENT MILLINGS OR COMPACTED STONE DUST MIX

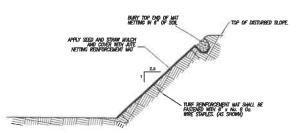




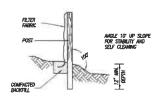
HAYBALE BARRIER NOT TO SCALE WOOD CHIP FILTER BERM



BITUMINOUS CONCRETE LIP CURBING



SLOPE STABILIZATION DETAIL



SILT FENCE

NORMAND E. THIBEAULT, JR., P.E.

04/18/2022	PER TOWN REVIEW & CTDOT APPROVAL
03/21/2022	PER CTDOT REVIEW
DATE	DESCRIPTION
•	REVISIONS

2. PLACE AND STAKE

DETAIL SHEET

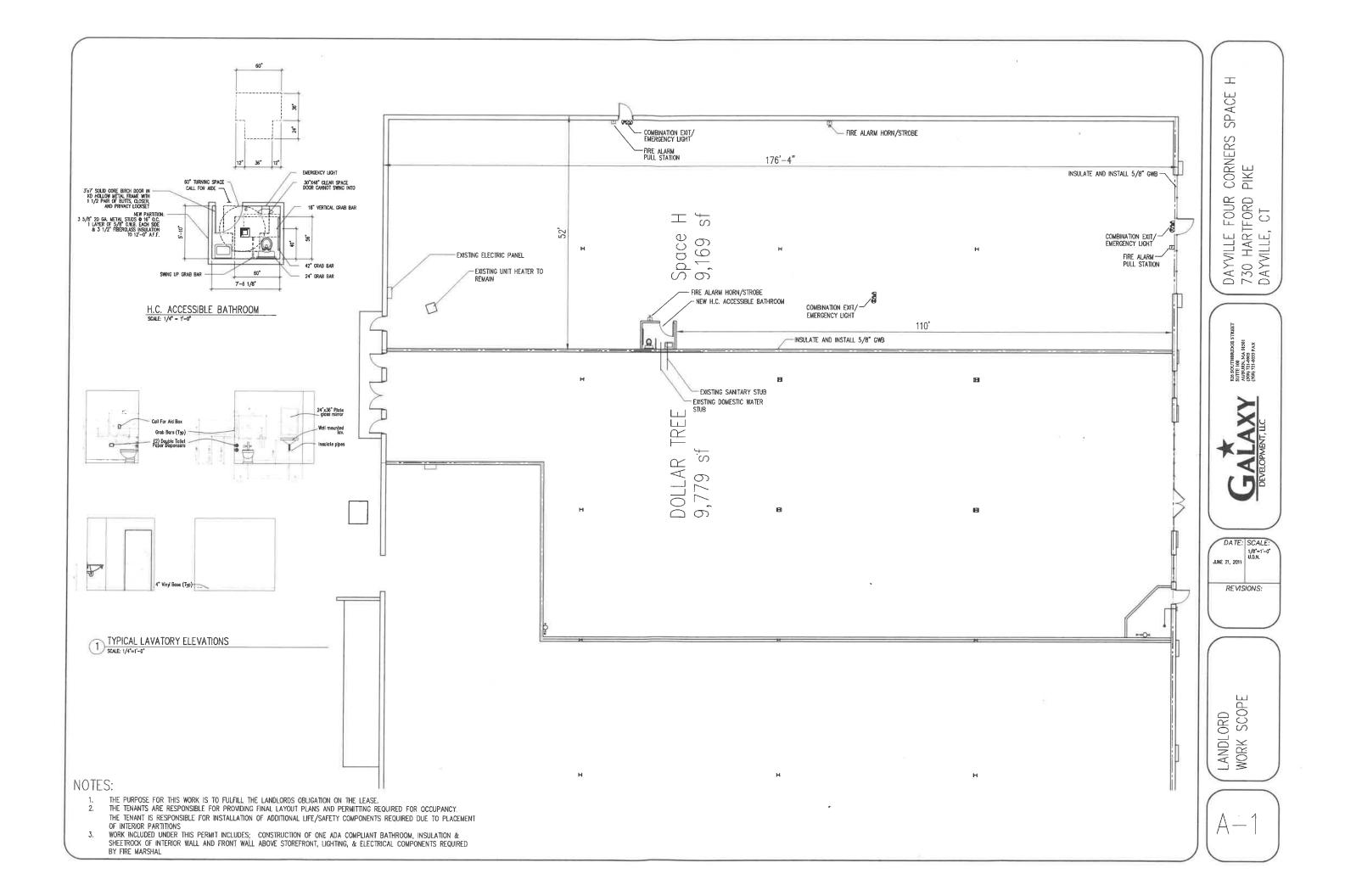
PREPARED FOR

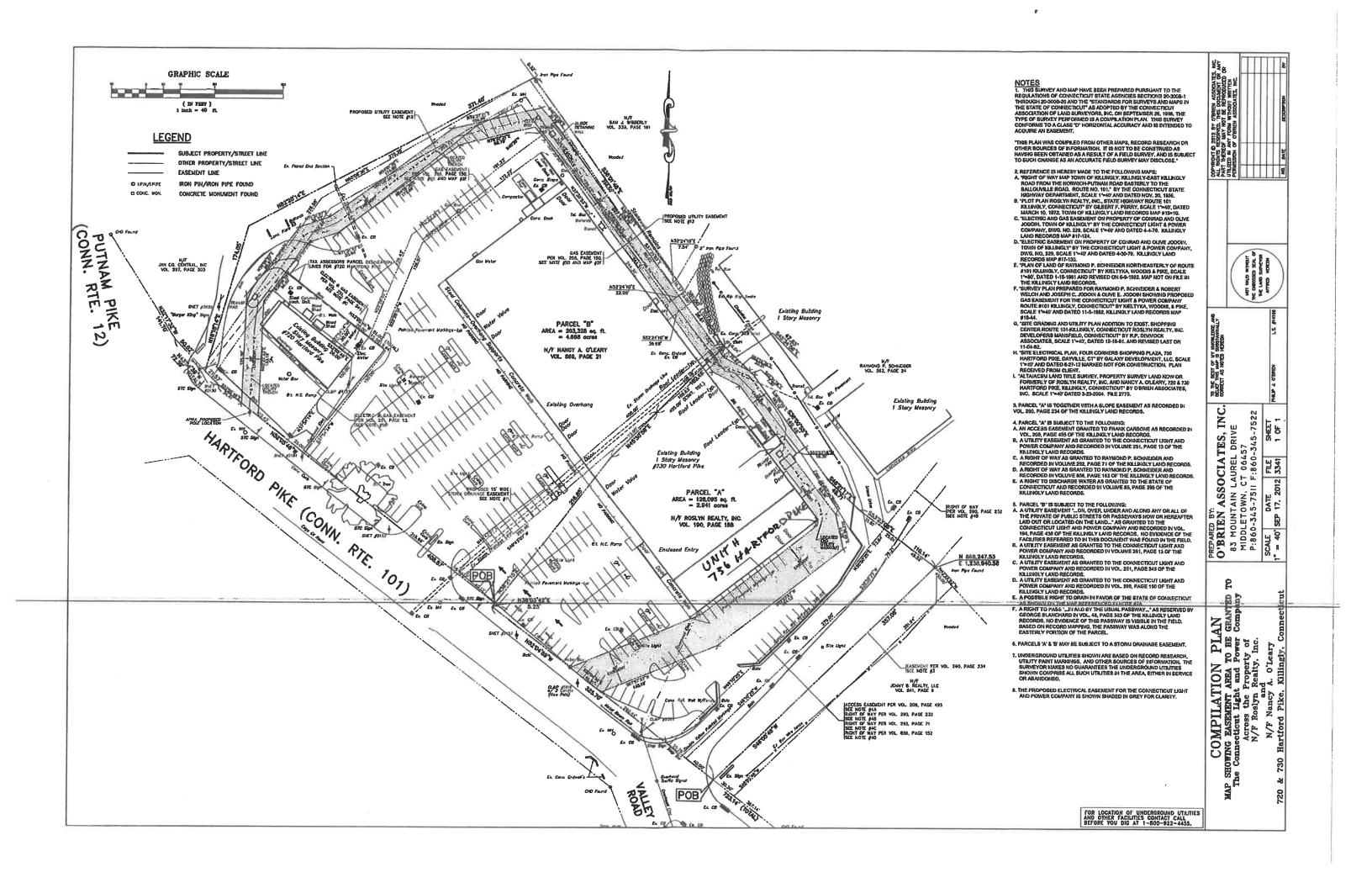
JOLLEY COMMONS, LLC WAUREGAN ROAD (ROUTE 12)

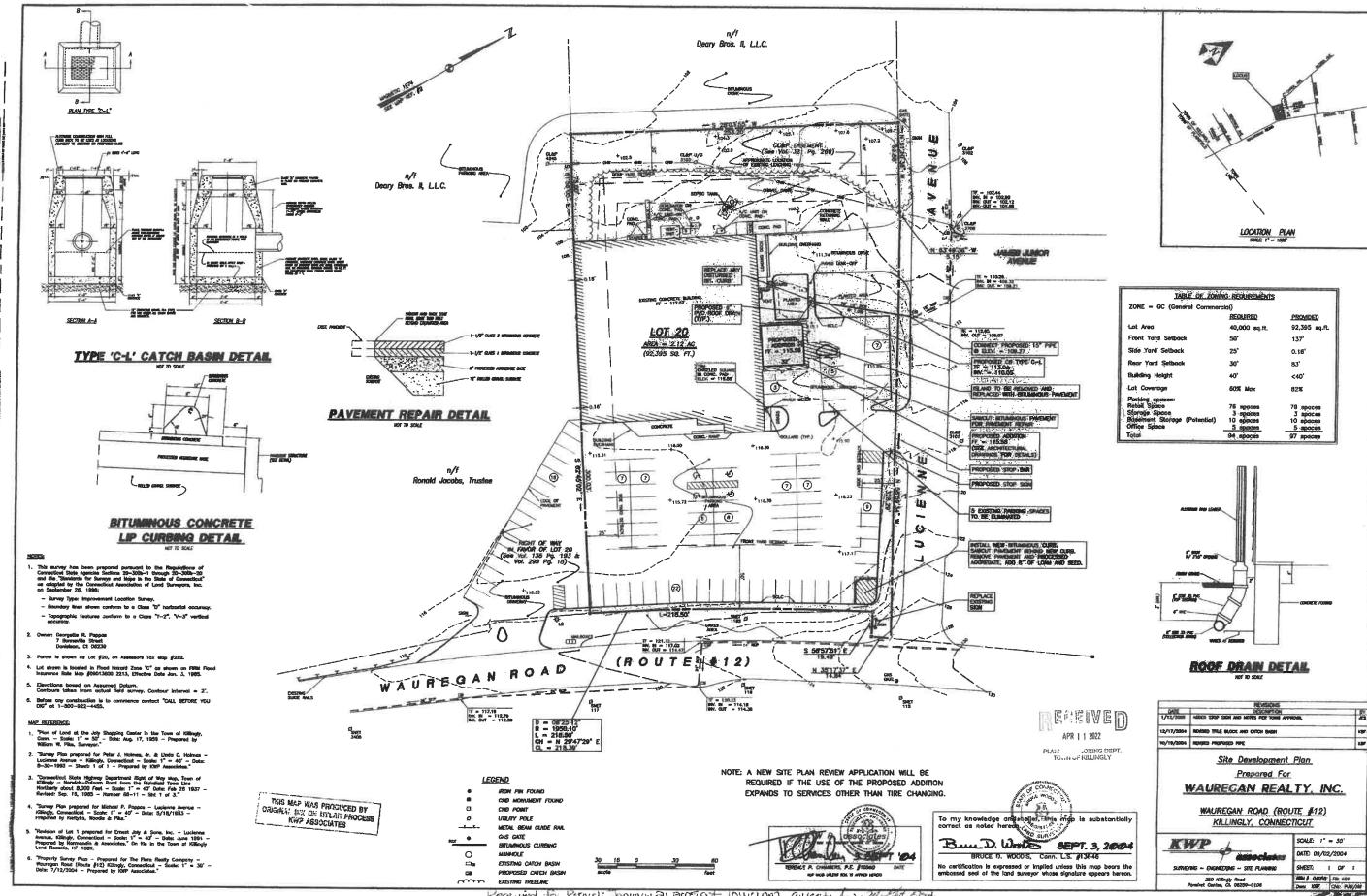
KILLINGLY CONNECTICUT Killingly Engineering Associates 4

Igineering & Surveying 114 Westcott Road P.O. Box 421 Dayville, Connecticut 06241 (860) 779-7299 - FAX: (860) 774-3703

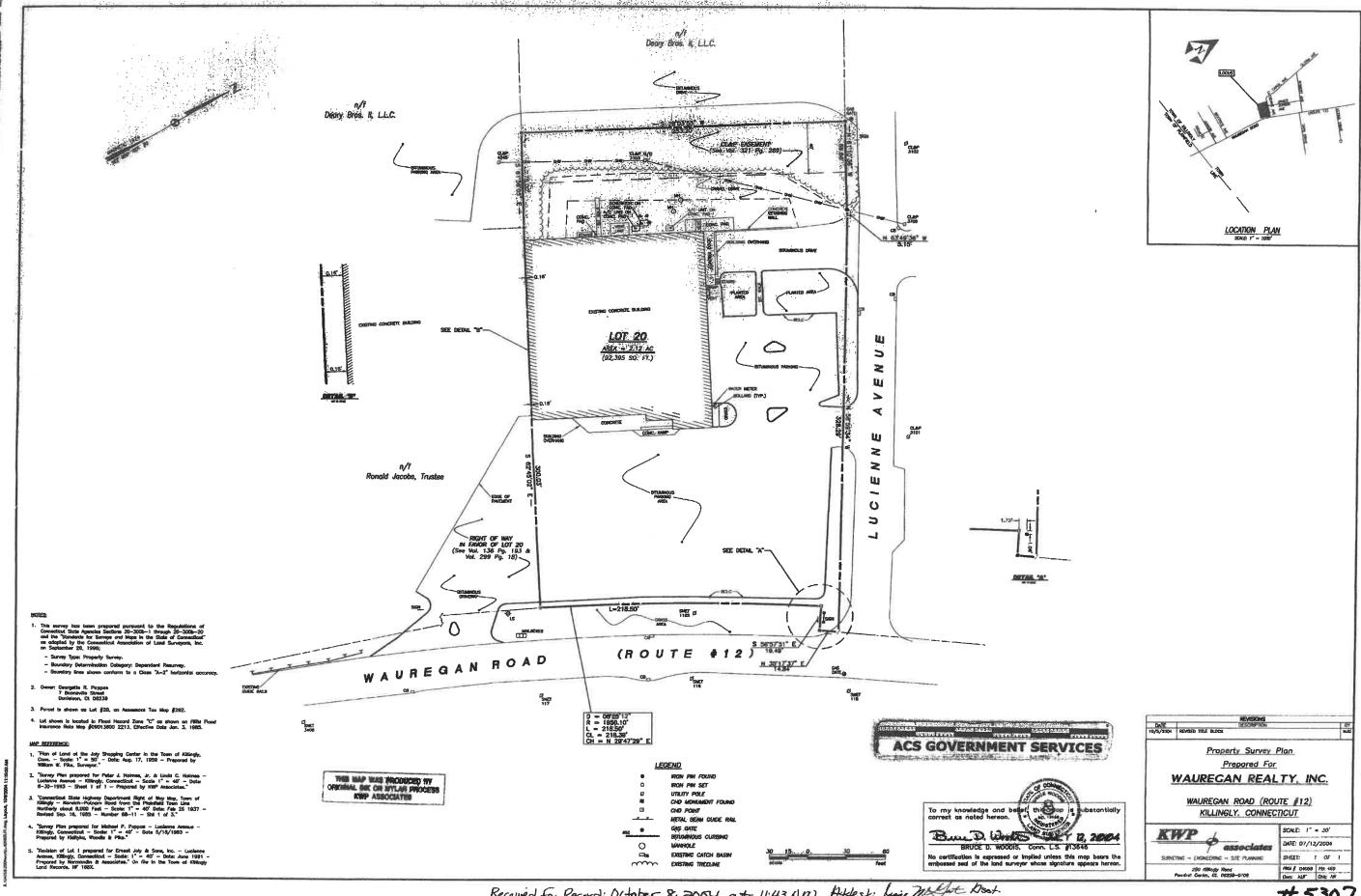
DATE: 12/21/2021 DRAWN: RGS SCALE: NOT TO SCALE DESIGN: NET SHEET: 6 OF 6 CHK BY: GG DWG. No: CLIENT FILE JOB No: 21070

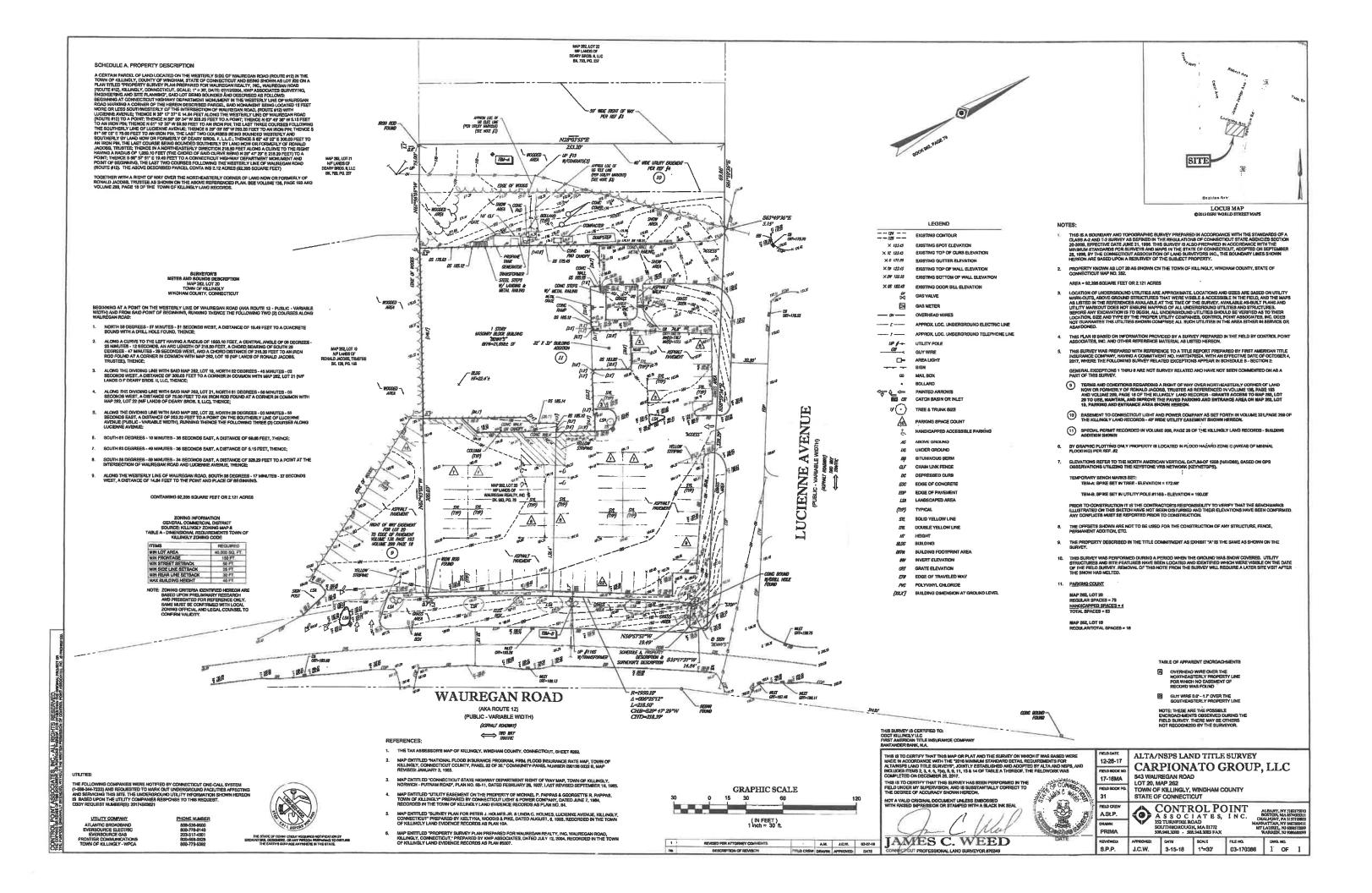


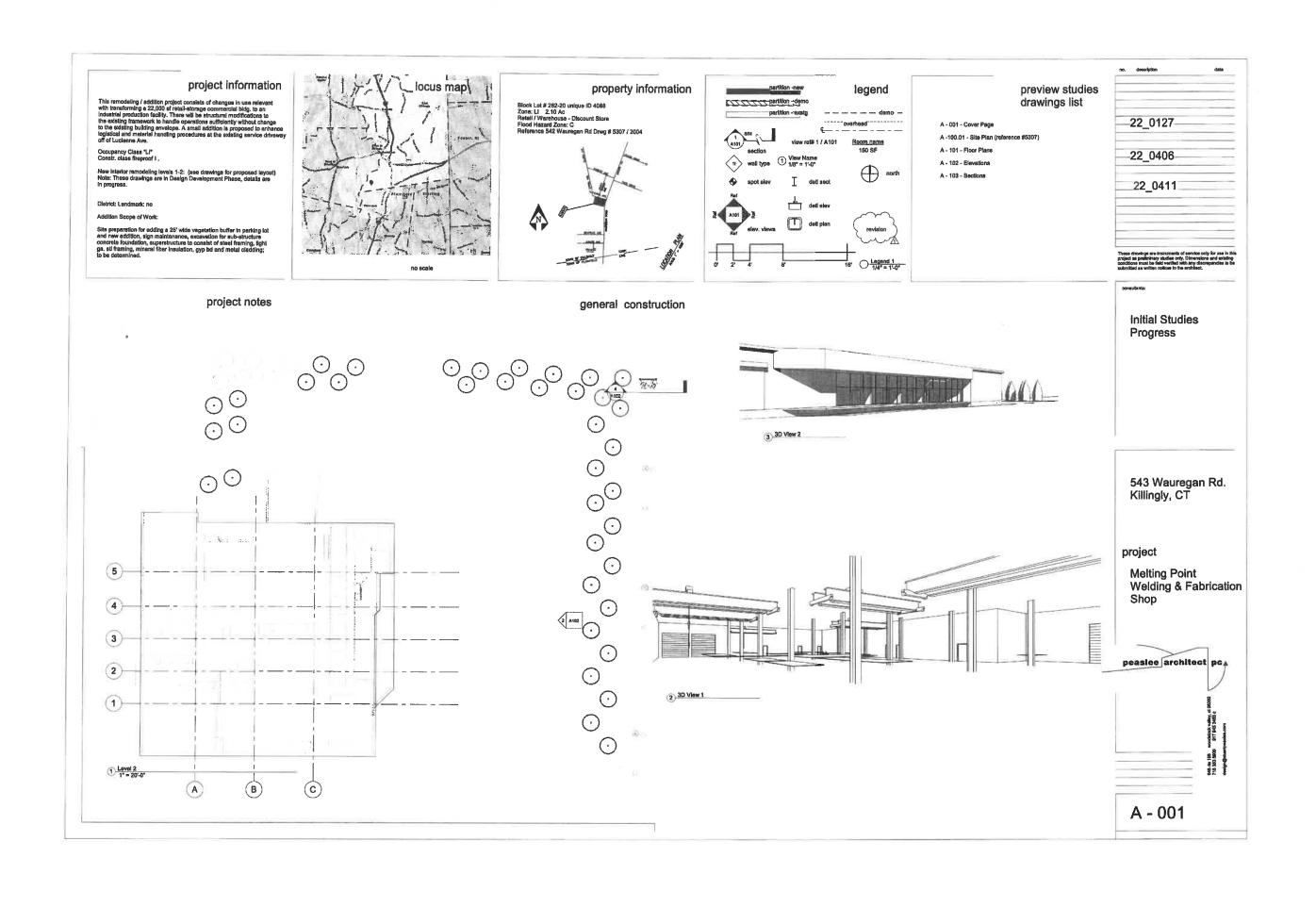


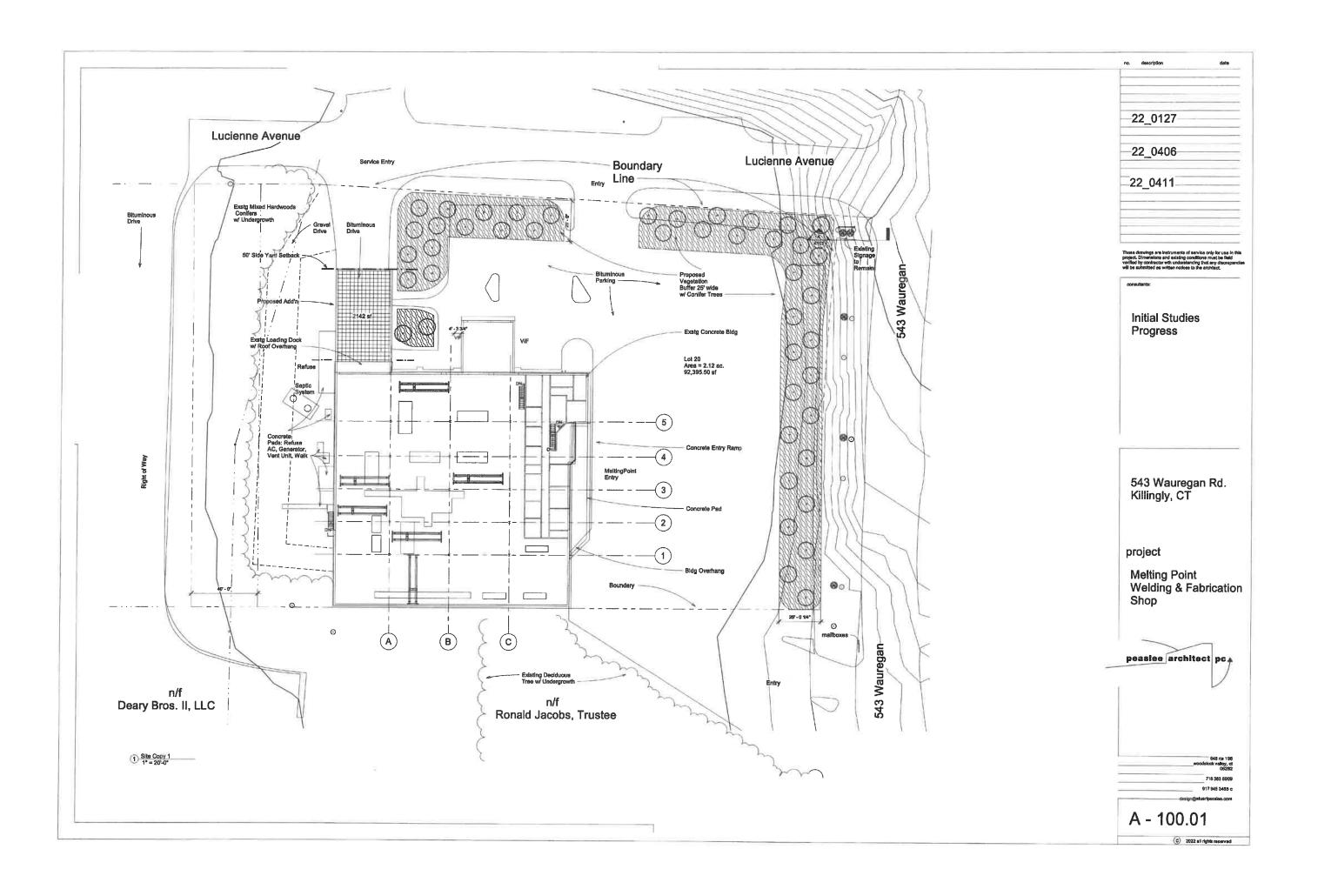


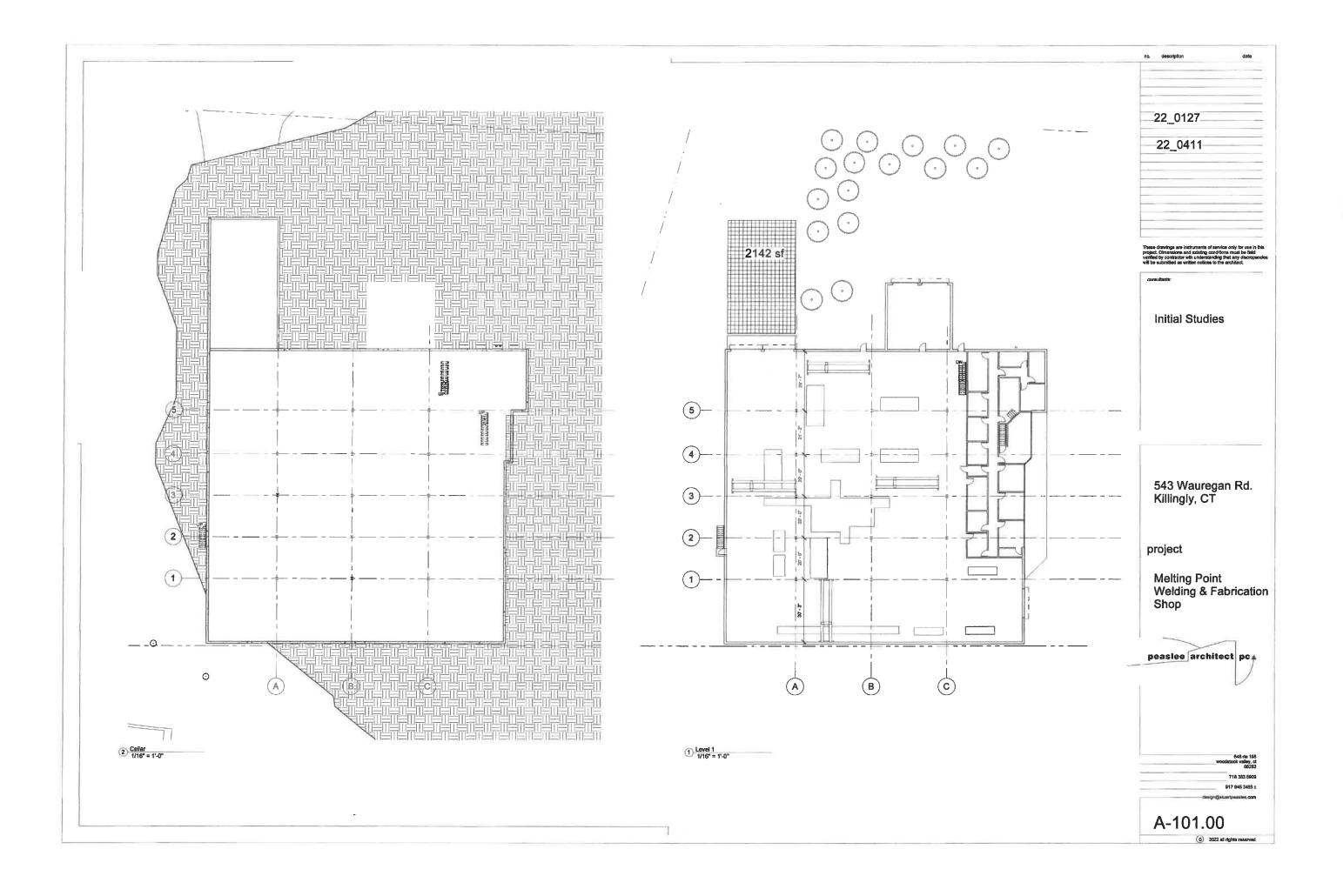
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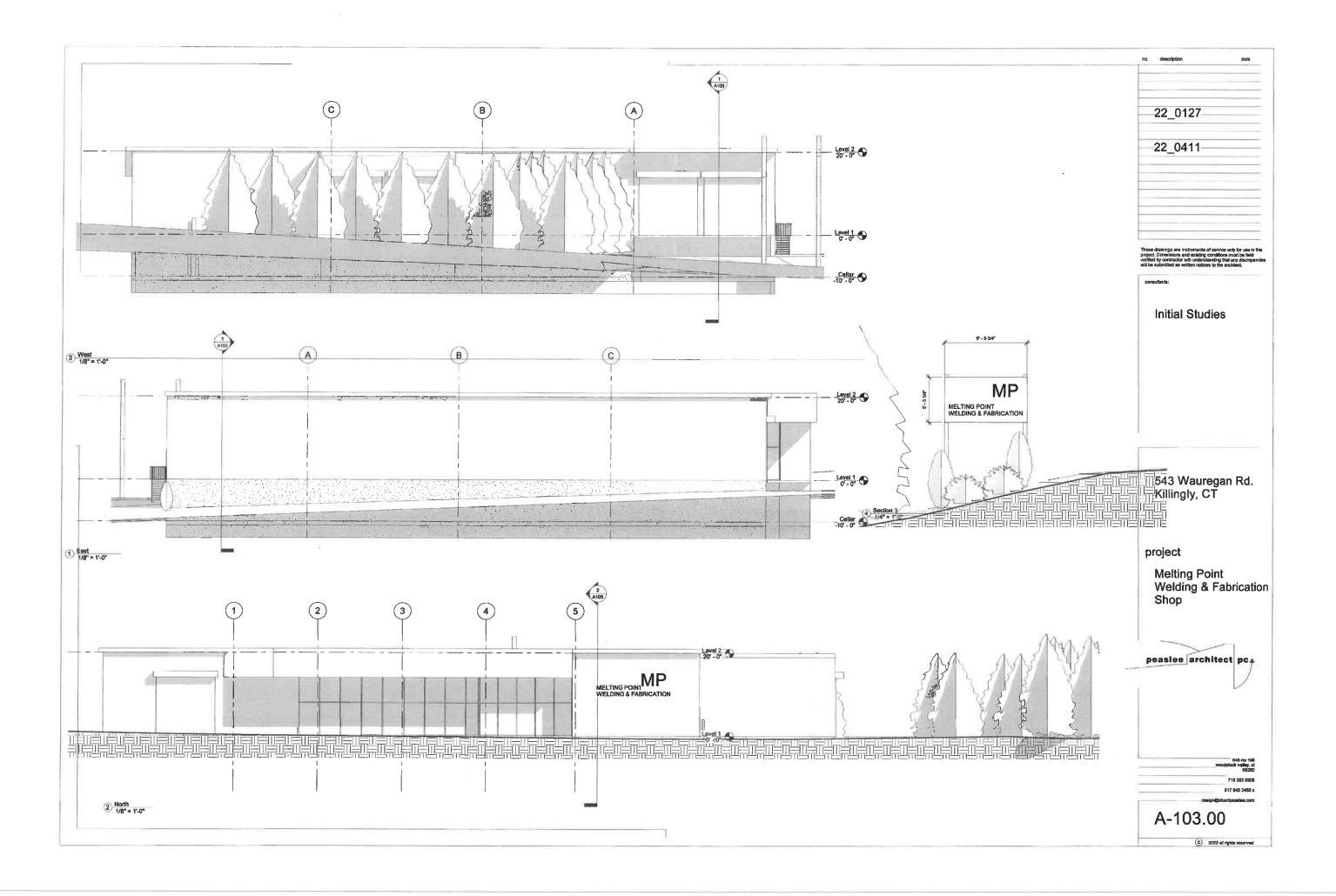


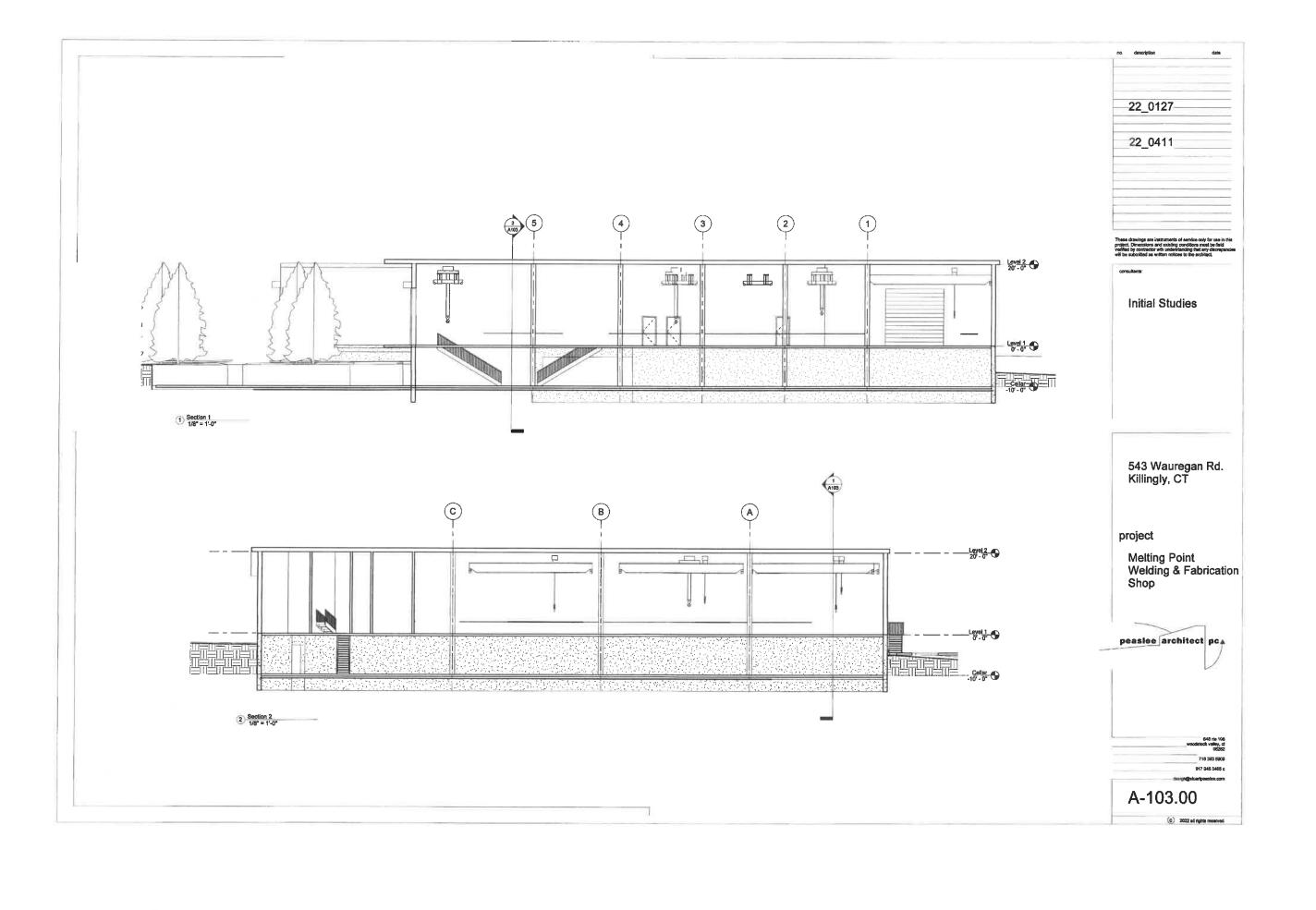


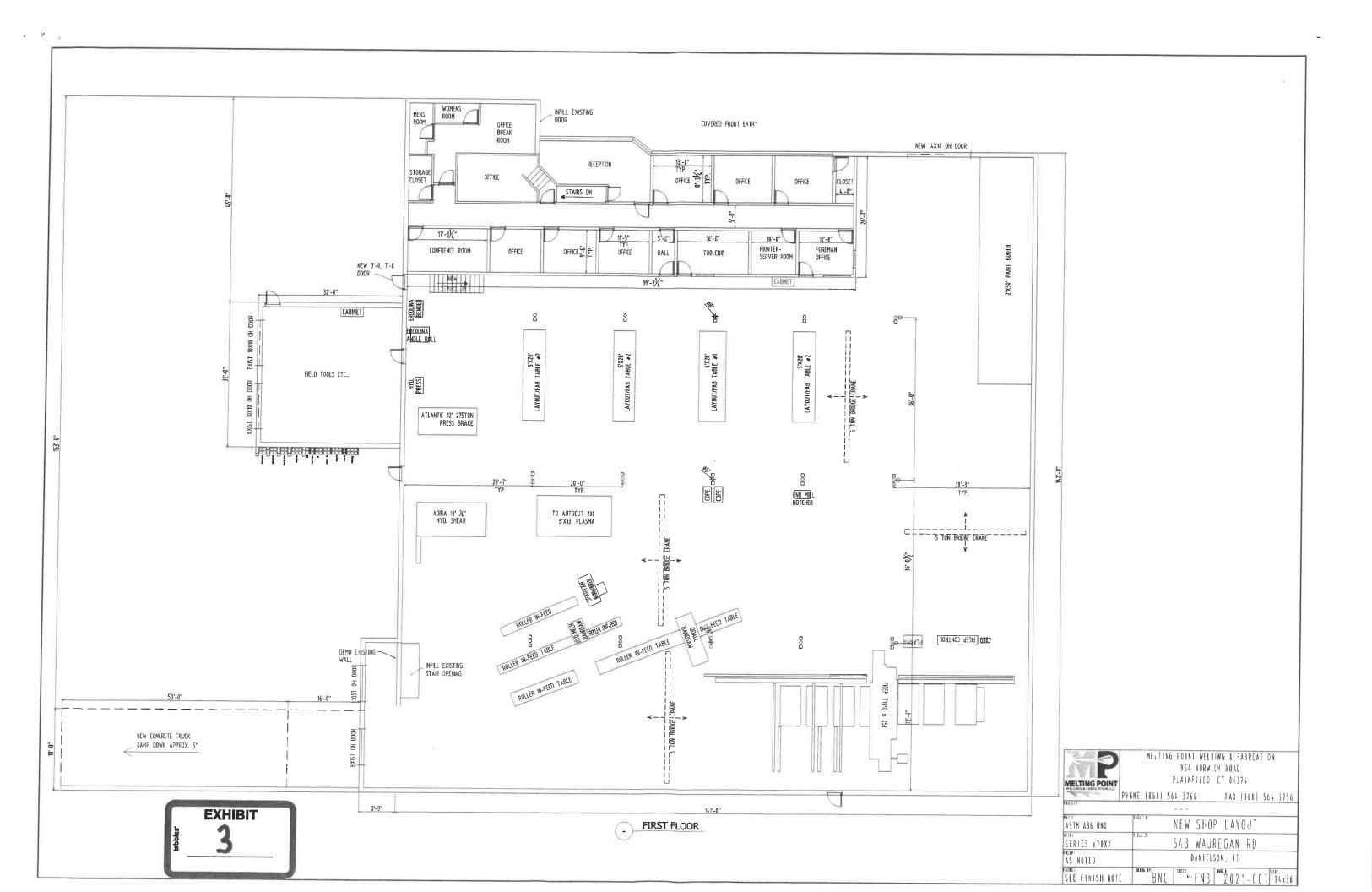




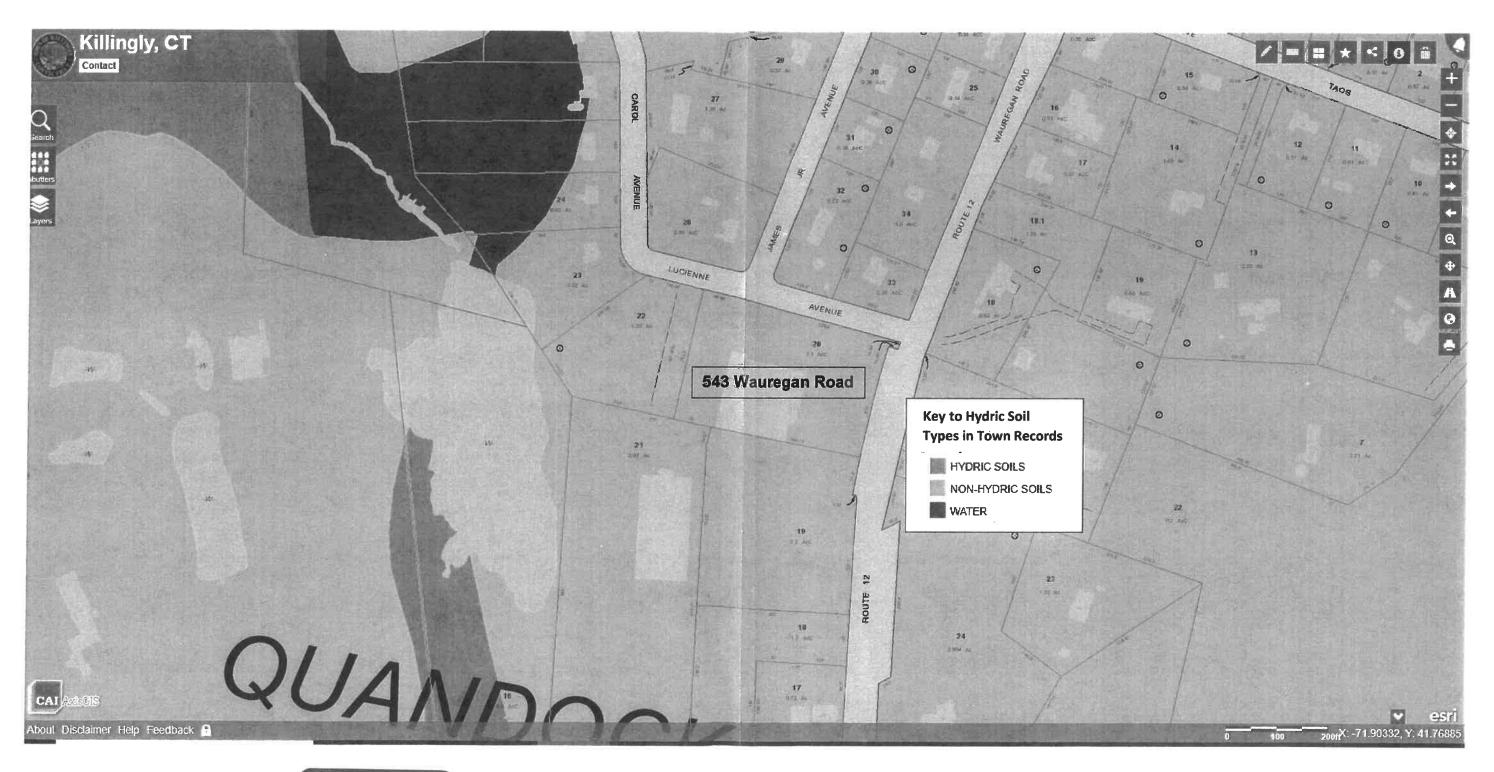








Records contained in the Town of Killingly's GIS mapping system show the subject properties contains non-hydric soils. The below map shows other properties with water features in this area, but which are <u>not</u> the subject of this application.





This map provides the addresses of abutting properties and names of the owners thereof as they appear in the Town of Killingly's records. Note, the applicant relies upon the Town's records and has not performed an independent title search of theses abutting properties.

