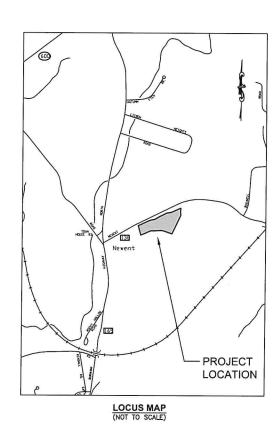
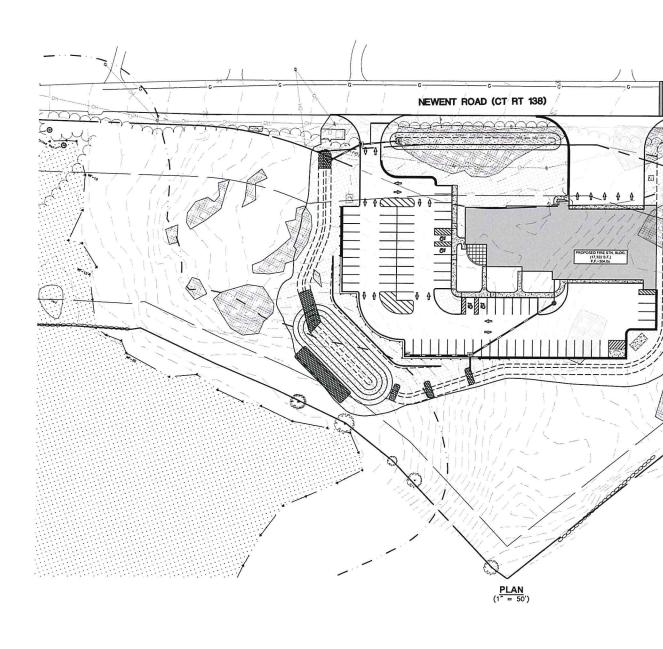
LISBON FIRE STATION

25 NEWENT ROAD (ROUTE 138)
TOWN OF LISBON







INDEX OF DRAWINGS

DRAWING

140.	
1.	PROPERTY SURVEY
2.	EROSION & SEDIMENTATION CONTROL PLAN
3.	SITE PLAN
4.	GRADING, DRAINAGE & UTILITIES PLAN
5.	DETAILS (SHEET 1)
6.	DETAILS (SHEET 2)
7.	CTDOT TRENCH DETAILS
8.	DRIVEWAY 'A' SIGHTLINE
9.	DRIVEWAY 'B' SIGHTLINE
10.	SEPTIC SYSTEM DESIGN
11.	PLANTING PLAN
12.	PLANTING DETAILS

DESCRIPTION OF DRAWINGS



APPROVAL BY THE TOWN OF LISBON

APPROVAL BY THE PLANNING AND ZONING COMMISSION

FINAL APPROVAL

CHAIRMAN SIGNATURE DATE

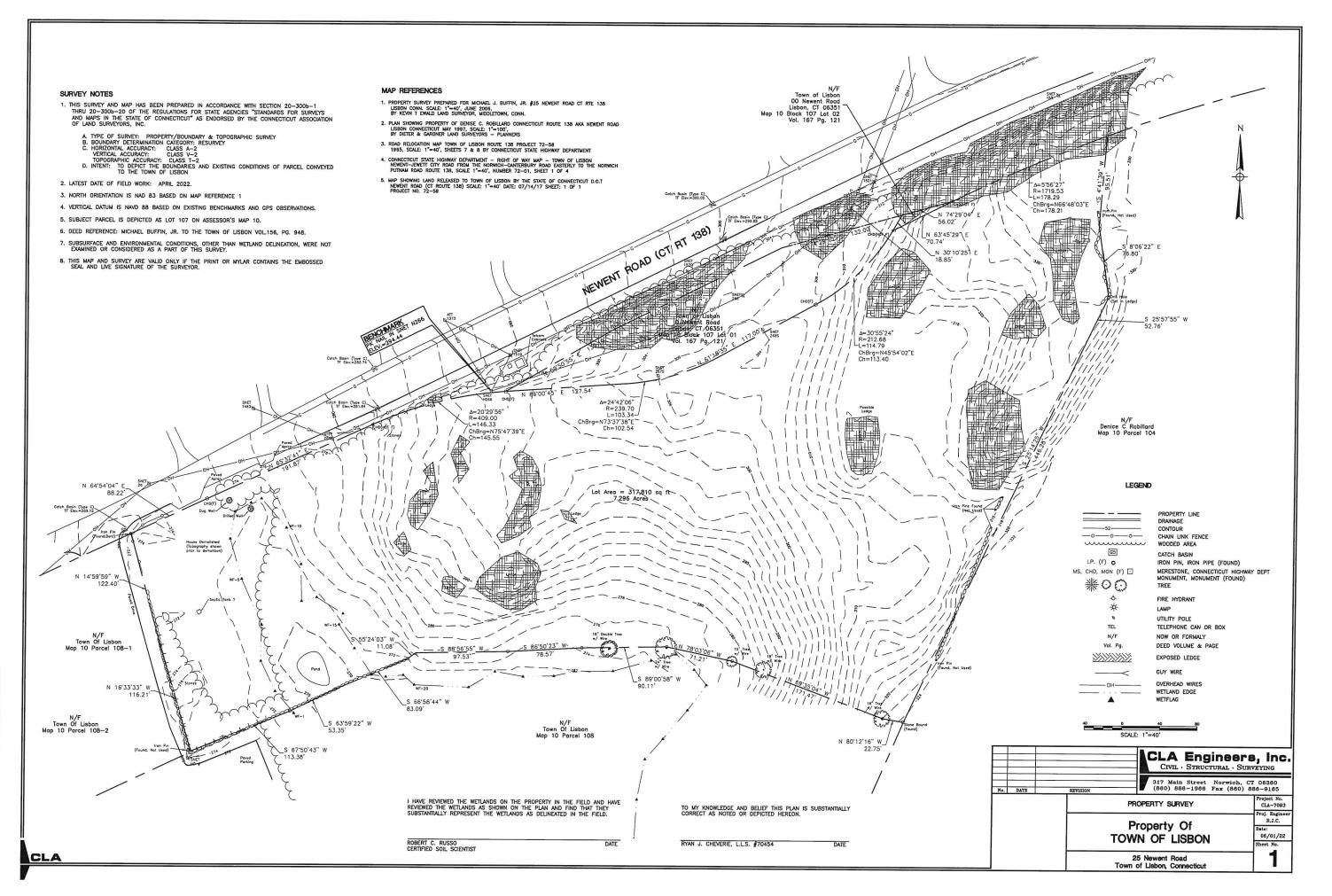
DATE OF APPROVAL

EXPIRATION DATE

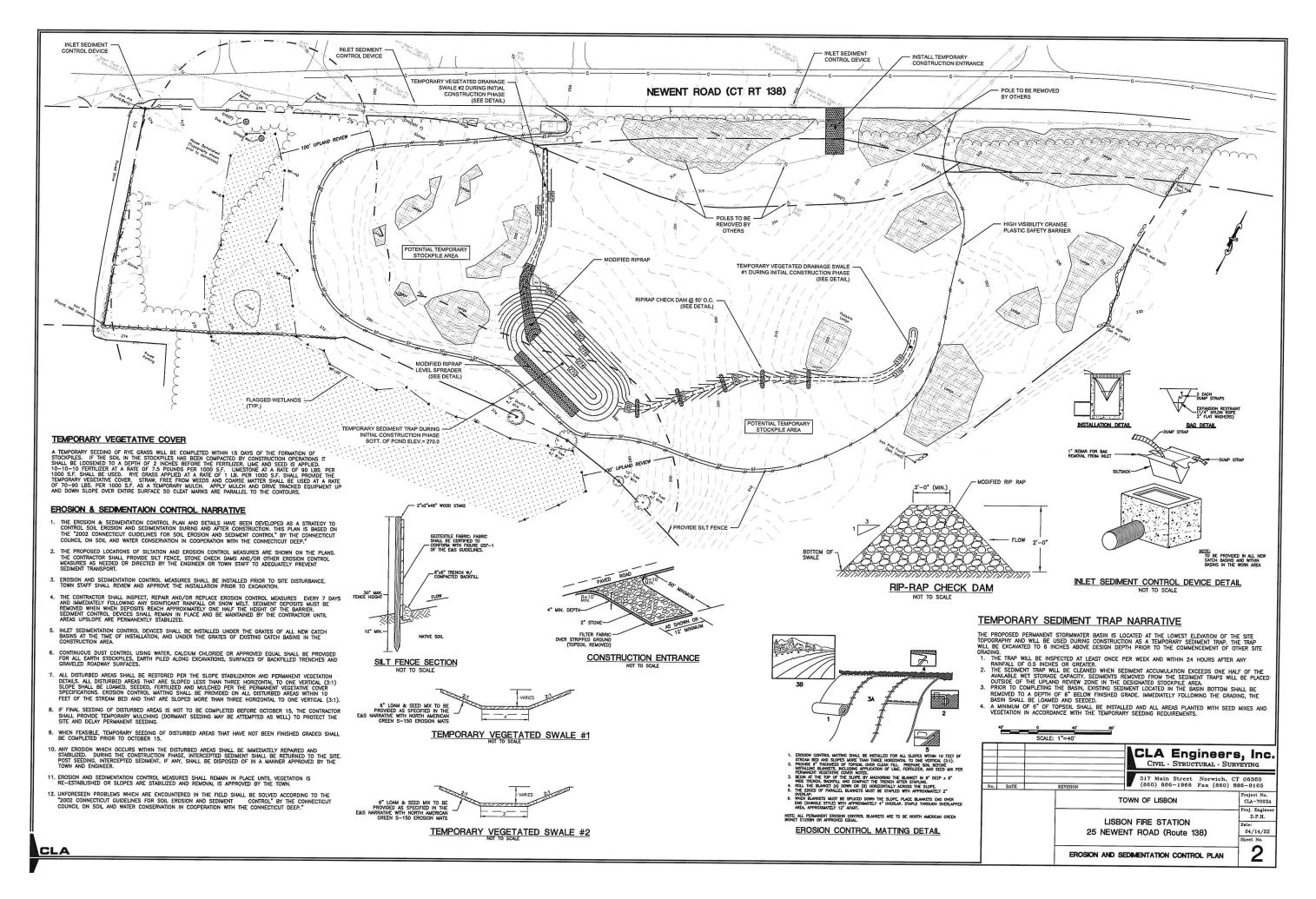
(REVISED JUNE 1, 2022) APRIL 26, 2022

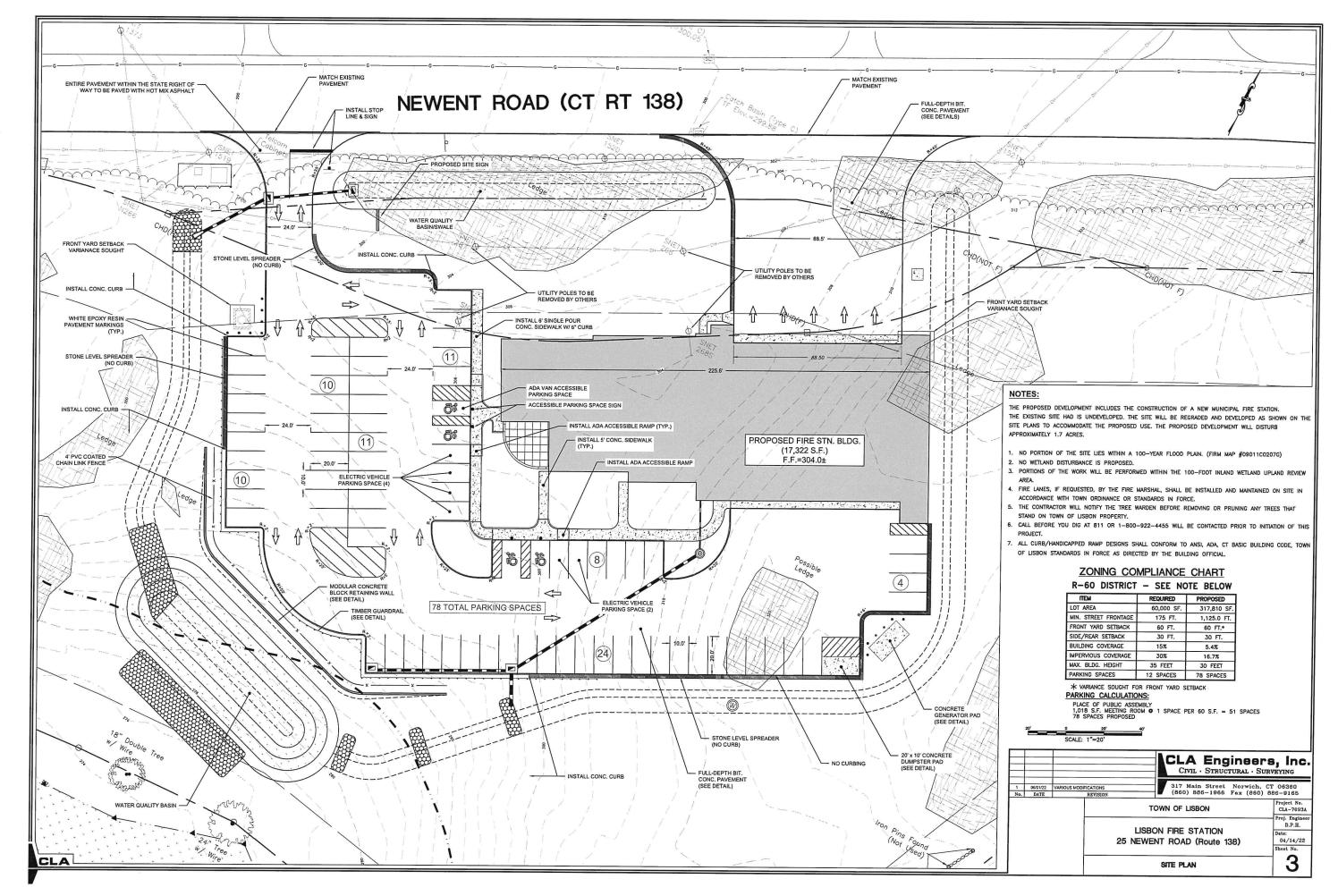
CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING

317 Main Street Norwich, CT 06360
(860) 886-1966 Fax (860) 886-9165

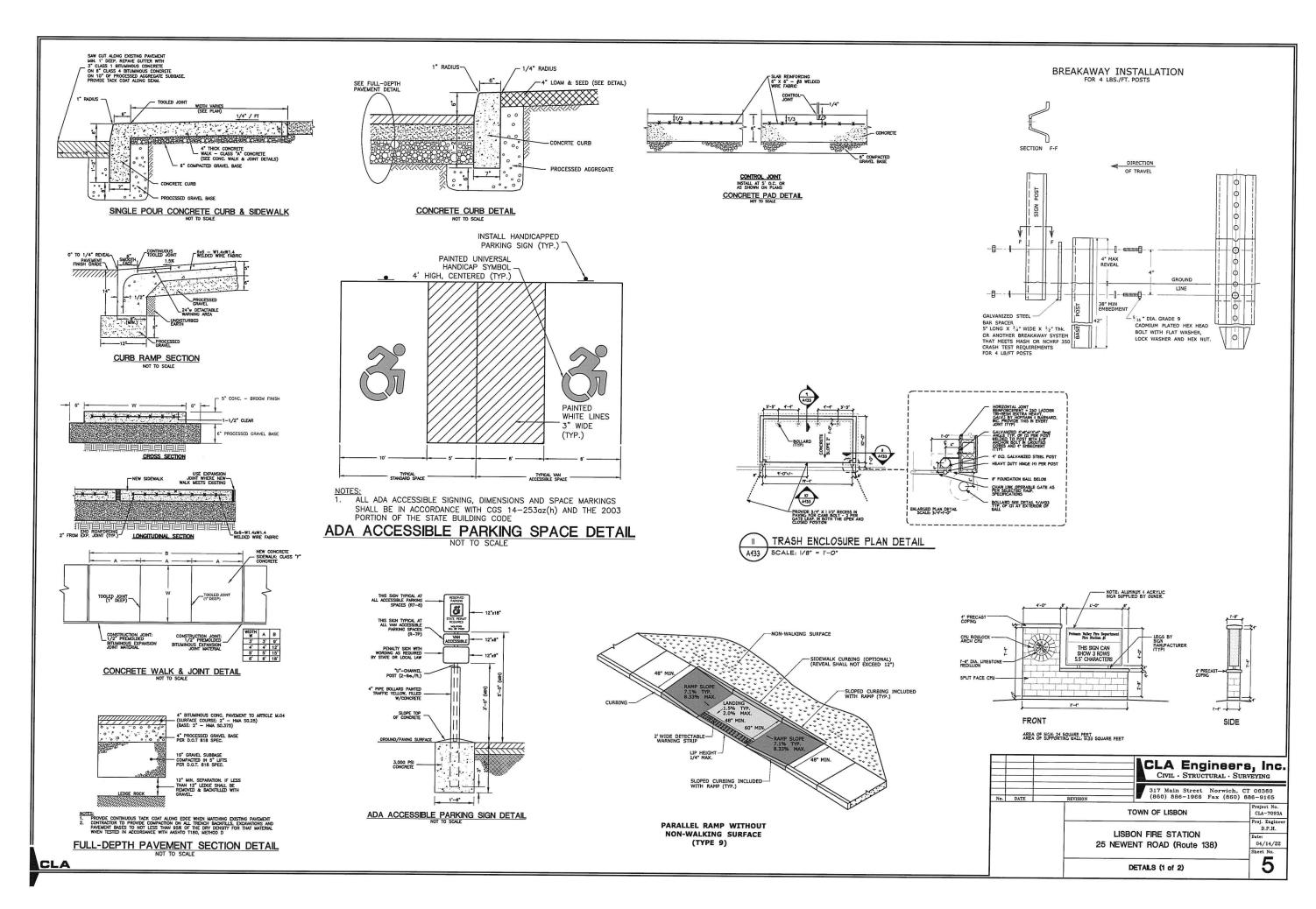




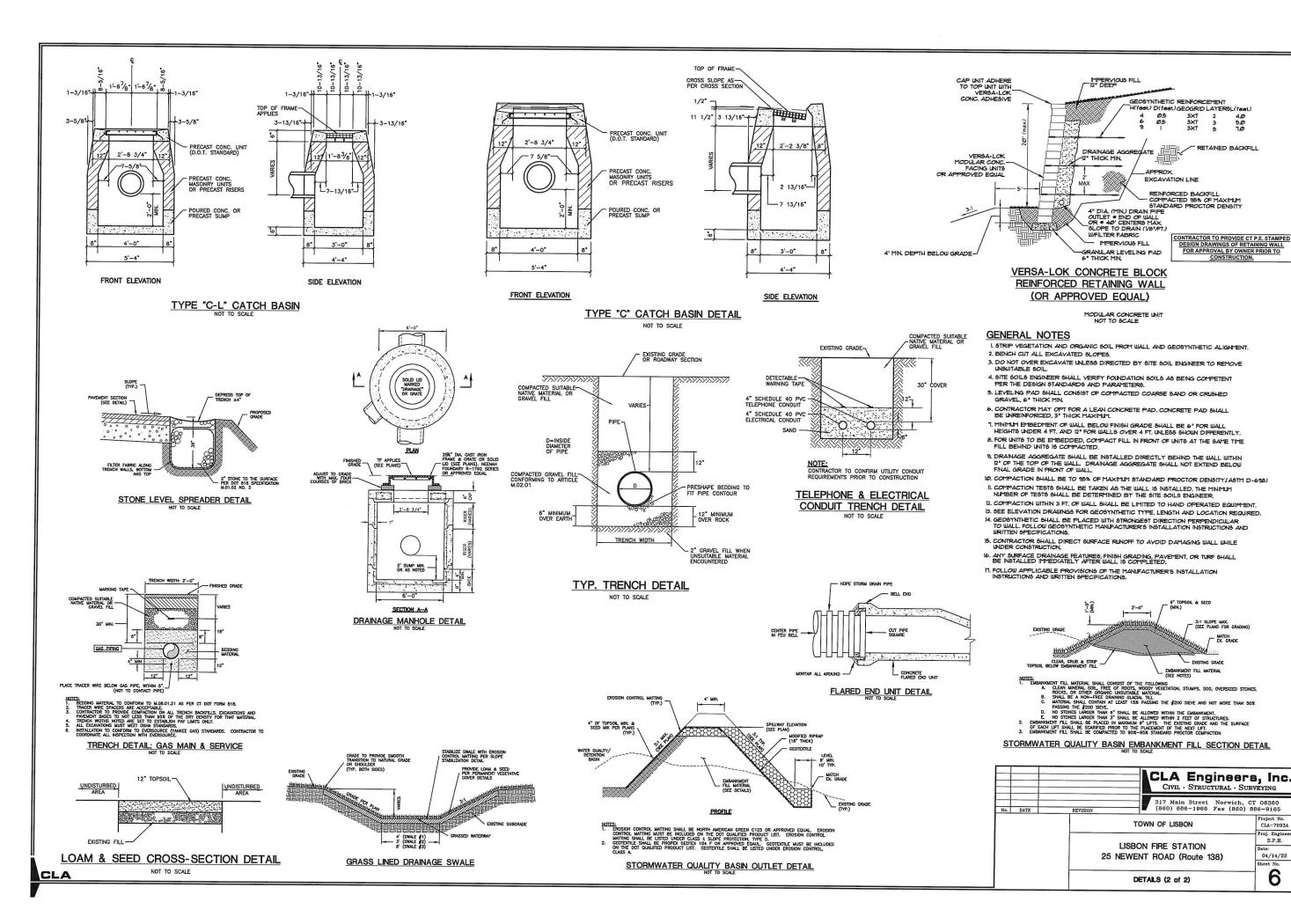




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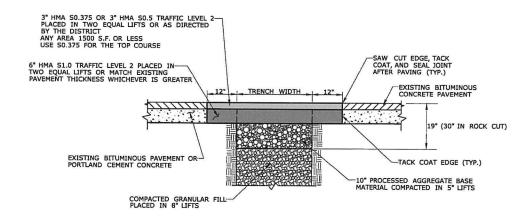


CLA-7093A roj. Engine D.P.H.

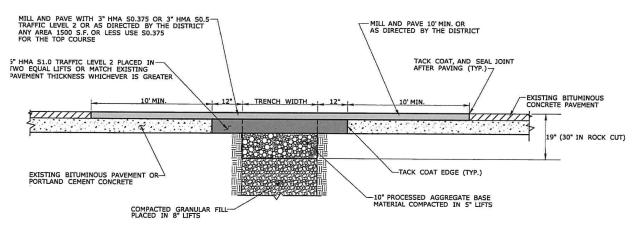
04/14/22

6

TEMPORARY PAVEMENT REPAIR FOR TRENCH THROUGH OVERLAID PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT



PERMANENT PAVEMENT REPAIR WITHOUT MILLING - THROUGH PORTLAND CEMENT CONCRETE OR BITUMINOUS CONCRETE PAVEMENT



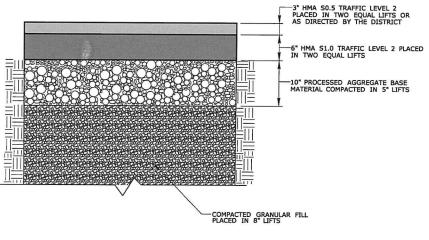
PERMANENT PAVEMENT REPAIR WITH MILLING

GENERAL NOTES:

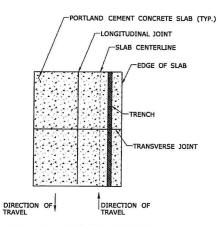
- 1. LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT:
- A. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE SLAB CENTERLINE AND THE EDGE OF SLAB, REMOVE CONCRETE
 AND BITUMINOUS CONCRETE PAVEMENT FROM THE TRENCH EDGE TO THE EDGE OF ROAD. IF THE LONGITUDINAL TRENCH
 FALLS BETWEEN THE LONGITUDINAL JOINT AND THE SLAB CENTERLINE, REMOVE THE ENTIRE CONCRETE SLAB AND BITUMINOUS
 CONCRETE PAVEMENT TO THE EDGE OF ROAD. IN EITHER CASE REBUILD WITH THE FOLLOWING:
- a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"
- 2. TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT:

TABLE 1						
TOTAL SLAB LENGTH (L)	MIN. LENGTH REMAINING					
40' OR LONGER	1/4 L					
15' - 40'	10'					
15' OR SHORTER	REBUILD TO NEAREST JOINT					

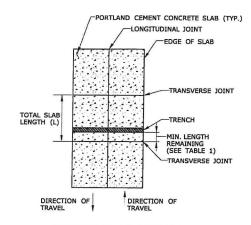
- A. FOR TRANSVERSE TRENCHES, THE MINIMUM SLAB LENGTH AS SHOWN IN TABLE 1 SHALL BE LEFT IN PLACE TO THE NEAREST TRANSVERSE JOINT. IF THIS CRITERIA CANNOT BE MET, THE EXISTING SLAB AREA FROM THE TRENCH EDGE TO THE NEAREST TRANSVERSE JOINT SHALL BE REMOVED AND REBUILT AS FOLLOWS:
 - a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"



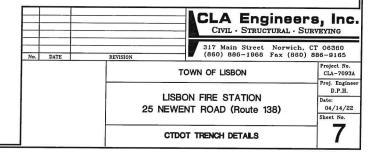
ROADWAY PROFILE



LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT (SEE NOTE 1)



TRANSVERSE TRENCHING
FOR JOINTED CONCRETE PAVEMENT
(SEE NOTE 2)





- THE SEWAGE DISPOSAL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE
 THE "TECHNICAL STANDARDS" SHALL BE THE CONNECTICUT DEPARTMENT OF PUBLIC HEALTH ON-SITE SEWAGE DISPOSAL REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS

- DISPOSAL SYSTEMS.

 ALL EXISTING UTILITIES TO BE ACCURATELY LOCATED PRIOR TO CONSTRUCTION. EXCAVATE TEST HOLES AS NEEDED TO LOCATE UNDERGROUND UTILITIES.

 EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN.

 CALL BEFORE YOU DIG SHALL BE CONTACTED AT 811 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

 CLEAR AND GRUB THE AREA WHERE THE SEPTIC SYSTEM IS TO BE CONSTRUCTED. ALL TOPSOIL IS TO BE STRIPPED AND STOCKPILED FOR FUTURE USE.

 TOPSOIL SHALL BE RE-APPLIED OVER ALL FILL AREAS BEYOND PROPOSED PAVEMENT, AND ALL DISTURBED AREAS TO PROVIDE A MINIMUM DEPTH OF FOUR INCHES.

 PROPOSED SEPTIC SYSTEM TO BE STAKED IN THE FIELD BY A LAND SURVEYOR LICENSED IN THE STATE OF CONNECTICUT. A BENCHMARK SHALL BE SET WITHIN 10-15' OF THE PROPOSED SEPTIC SYSTEM FOR CONSTRUCTION.

 ALL NEW STORM DRAINAGE STRUCTURES AND PIPE LESS THAN 25 FEET FROM THE NEW SEPTIC SYSTEM SHALL BE WATERTIGHT IN ACCORDANCE WITH TABLE 1 OF THE TECHNICAL SPECIFICATIONS.

 SEWER LINE FROM FOUNDATION WALL TO SEPTIC TANK SHALL BE 6' SCHEDULE 40 PVC ASTM D 1785 AND JOINTS PER HEALTH DEPT. CODE.

Town of Usbon Proposed Fire Department Headquarters (17,275 Sq. Ft.)

Volunteer Department (No full-time employees, No Bunking) Design Flow has been determined based on water use data of similar facilities

Facility	Date	Water Used (GPD)	Building Size (Sq. Ft.)	Type of Fire Department Facility
Armonk, NY	2004-2013	249	26,800	Volunteer department, no bunking in, runs ambulances (52% of calls), plus used an additional 53 gpd for truck washing & tank too up
Canton, NY	2003-2013	521		Volunteer department, 73% of calls are ambulance. Usage includes truck fill & washing incl. members cars.
Sandwich, MA	2012-2013	276		Has 3 bunkers
Kingston, PA	2/13 - 11/13	357	18,237	Fully Occupied Career Department with shifts of 6 plus administration, 4" meter averages 72 gpd, 6 Career firefighters at all times, plus volunteers

Kingston, rA 2005-2013 222 10,505 Volunteer department, no bunking in. Philipstown, NY 2010 136 16,801 Volunteer department, no bunking in.

Factor of Safety Proposed Design Flow_ Say

TEST HOLE DATA:

RECORDED BY ROBERT RUSSO OF CLA ENGINEERS, INC. ON FEBRUARY 8, 2022

TEST HOLE-6 TOTAL DEPTH: 80"
BEDROCK: 80"
WATER:NONE
MOTTLES: NONE
ROOTS:44"

ROOTS: 44*
0-7" TOPSOIL, DARK BROWN, FINE SANDY LOAM
7-44" SUBSOIL, GRAY, BROWN FINE SANDY LOAM
44-80" GRAY FINE SANDY LOAM W/ STONES AND TRACE GRAVEL

TEST HOLE-14 TOTAL DEPTH : 82" BEDROCK: 72" WATER: NONE MOTTLES: 68"

0-10" TOPSOIL, BROWN, FINE SANDY LOAM
10-27" SUBSOIL, YELLOW, BROWN FINE SANDY LOAM
27-82" GRAY, GREEN LOAMY SAND W/ COBBLES & STONES

TEST HOLE—21
TOTAL DEPTH: 24-37"
BEDROCK: 24-37"
WATER: NONE
MOTTLES: NONE TOPSOIL

7- 24 TO 37" SUBSOIL, BROWN FINE SANDY LOAM W/ BROKEN LEDGE/ROTTEN PIECES

TEST HOLE—22
TOTAL DEPTH: 70"
BEDROCK: 65"
WATTER: NONE
MOTTLES: NONE

0-9"
TOPSOIL, DARK BROWN, FINE SANDY LOAM
9-47"
SUBSOIL, YELLOW, BROWN FINE SANDY LOAM
47-65"
GRAY, GREEN LOAMY SAND W/ GRAYEL
85-270"
ROTTEN ROCK

TEST HOLE DATA:

TEST HOLE-8B ROCK: WATER: 92" NONE TEST HOLE-10B ROCK: WATER:

SEPTIC SYSTEM DESIGN:

PRIMARY SYSTEM: BASED ON T.P.#10B & 14
PERCOLATION RATE: 5.1 MIN./INCH (PERC. #2)
PROPOSED VOLUNITEER FIRE STATION
DESION FLOW RATE = 600 G.P.D.
APPLICATION RATE = 1.5

APPLICATION RATE = 1.5

EFFECTIVE LEACHING AREA REQUIRED = 600/1.5 = 400 SF

USE A 18" DEEP x 48" WIDE PRECAST CONCRETE CALLERY (H-20 LOADING)

EFFECTIVE LEACHING AREA OF CALLERY = 6.2 SF/LF

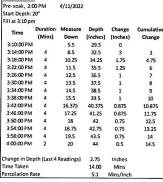
LENGTH OF SYSTEM REQUIRED = (400 SF)/(6.2 SF/LF) = 64.5 LF

SLOPE = 12.0%

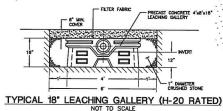
DEPHH TO DESCRIPTION 1.1000

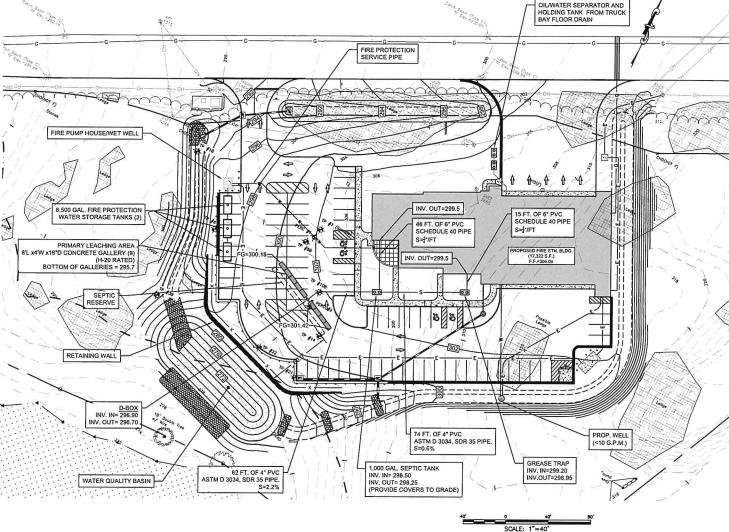
SLOPE = 12.0%
DEPTH TO RESTRICTIVE LAYER = 70" (TH #10B ROCK)
MLSS NEED NOT BE CONSIDERED
USE 9 No. 8-FT LONG CALLERIES IN SINGLE ROW
LEACHING AREA PROVIDED = 446.4 SF

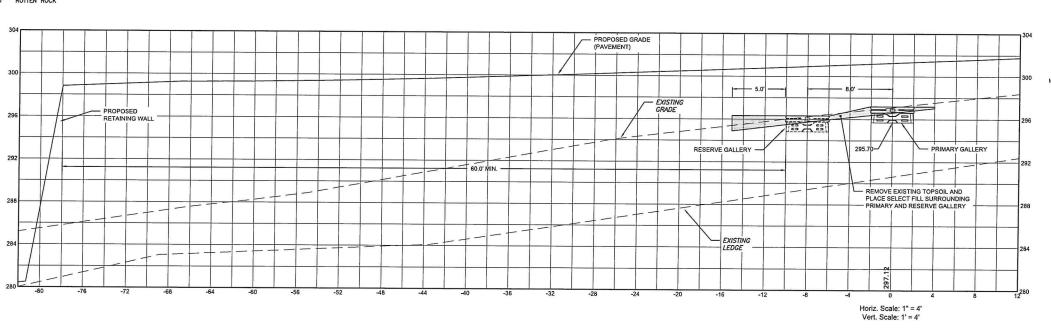
RESERVE SYSTEM: BASED ON PRIMARY SYSTEM



COVER





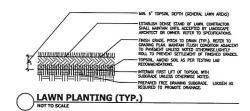


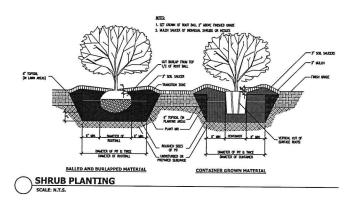
LEGEND PROPERTY LINE ETH ETHIN PERSON ETHIN ETH DRAINAGE __ __52__ __ _ CONTOUR CHAIN LINK FENCE umm WOODED AREA CATCH BASIN I.P. (F) o IRON PIN, IRON PIPE (FOUND) MS, CHD, MON (F) MERESTONE, CONNECTICUT HIGHWAY DEPT MONUMENT, MONUMENT (FOUND) 2x2 5/8 16 GA. WIRE MESH **※○○** TREE UTILITY POLE TEL TELEPHONE CAN OR BOX N/F NOW OR FORMALY 1-3/4 Vol. Pg. DEED VOLUME & PAGE ********* EXPOSED LEDGE \bigcirc GUY WIRE OVERHEAD WIRES WETLAND EDGE WETLAND FLAG STANDARD D-BOX

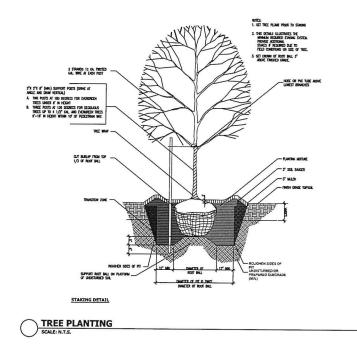
CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING 317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165 TOWN OF LISBON CLA-7093/ roi. Engin D.P.H. LISBON FIRE STATION 04/14/22 25 NEWENT ROAD (Route 138) 10 SEPTIC SYSTEM DESIGN

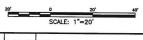
CLA

CODE TREES	BOTANICAL NAME	COMMON NAME	SIZE	
AR	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE 'OCTOBER GLORY'	2 1/2" - 3" B&B	
AL.	AMELANCHIER LAEVIS	ALLECHENCY SHADBLOW	MULTI-STEMMED - 8-9' HGT. B&	
CC	CERCIS CANADENSIS	REDBUD 'MULTISTEM'	8'-9' HGT. B&B	
CK	CORNUS KOUSA	KOUSA DOGWOOD	8'-9' HCT. B&B	
MP	MALUS PRAIREFIRE	PRARIEFIRE CRABAPPLE	2 1/2" - 3" B&B	
MG	MAGNOLIA GRANDIFOLIA	SOUTHERN MAGNOLIA	2 1/2" - 3" B&B	
PST	PINUS STROBUS	EASTERN WHITE PINE	B'-9' HGT. B&B	
PY	PRUNUS YEDOENSIS	YOSHINO CHERRY	8'-9' HCT. B&B	
PG	PICEA GLAUCA	WHITE SPRUCE	8'-9' HGT. B&B	
SHRUBS				
BD	BUDDLEJA DAVIDII "BLACK KNIGHT"	BLACK KNIGHT BUTTERFLY BUSH	2'-3' B&B	
CA	CLETHRA ALNIFOLIA	SUMMER SWEET	2'-3' B&B	
HM	HYDRANGEA MACROPHYLLA 'TWIST N SHOUT'	TWIST N SHOUT BIG LEAF HYDRANGEA	2'-3' B&B	
IG	ILEX GLABRA "SHAMROCK"	INKBERRY SHAMROCK	2'-3' B&B	
PC	PHILADELPHUS CORONARIUS X LEMOINE	MOCK ORANGE "LEMOINEI"	2'-3' B&B	
SJ	SPIRAEA JAPONICA 'FLAMING GLOBE	FLAMING GLOBE SPIREA	3'-4' B&B	
SV	SYRINGA VULGARIS	COMMON LILAC	3'-4' B&B	
VC	VACCINIUM CORYMBOSUM	HIGH BUSH BLUEBERRY	3'-4' B&B	
VD	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3'-4' B&B	
PERENNIALS				
ARO	ALCEA ROSEA	HOLLYHOCK	1 GAL	
AT	ASCLEPIAS TUBEROSA	BUTTERFLY WEED	1 CAL	
ANA	ASTER NOVAE ANGLIAE	NEW ENGLAND ASTER	1 GAL	
BO	BORAGE OFFICINALIS	BORAGE	1 GAL	
COR	COREOPSIS GRANDIFLORA	COMMON TICKSEED	1 GAL	
CC	CARYOPTERIS CLANDONENSIS	CARYOPETERIS 'WORCESTER GOLD'	1 GAL	
HSO	HEMEROCALLIS 'STELLA DE ORO'	STELLA DE ORO DAYLILY	1 GAL.	
EP	ECHINACEA PURPUREA	PURPLE CONEFLOWER	1 CAL	
HA	HELIOTROPE ARBORESCENS	COMMON HELIOTROPE	1 GAL	
HHR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL	
HBA	HOSTA 'BLUE ANGEL'	BLUE ANGEL HOSTA	1 GAL	
HSS	HOSTA SUM & SUBSTANCE	SUM & SUBSTANCE HOSTA	1 GAL	
LM	LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDER	1 GAL	
М	MATTHIOLA INCANA	COMMON STOCK FLOWER	1 GAL	
MF	MONARDA FISTULOSA	WILD BEE BALM	1 GAL	
NC	NEPETA CATARIA	CATMINT	1 GAL	
RH	RUDBECKIA HIRTA	BLACK EYED SUSAN	1 GAL	
22	SEDUM SPECTABILE	STONECROP	1 GAL	
CRASSES & G		Secretor recom		
FG	FESCUS GLAUCA	BLUE FESCUE	/ 3	
MS	MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	5 GAL	
VM	VINCA MINOR	PERIWINKLE	PLUGS	









	CLA CIVIL .	Engineers, Inc
No. DATE	317 Main (860) 886	Street Norwich, CT 06360 -1966 Fax (860) 886-9165
	TOWN OF LISBO	Project No. CLA-7093A
		Proj. Enginee D.P.H.
	LISBON FIRE STA 25 NEWENT ROAD (R	Dates
	PLANTING DETAIL	Sheet No.