



Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: **303.571.3306**
Facsimile: 303.571.3284
Donna.L.George@xcelenergy.com

September 5, 2023

City of Longmont Planning and Development Services
385 Kimbark Street - PO Box 1348
Longmont, CO 80501

Attn: Kristin Cote

Re: McDonald's at Sandstone Marketplace, Case # DV-SITE PLAN-23-00016

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the site plan for **McDonald's at Sandstone Marketplace**. Please be aware PSCo owns and operates existing intermediate pressure natural gas distribution facilities along the north property line. The property owner/developer/contractor must complete the application process for any new natural gas or electric service, or modification to existing facilities via [xcelenergy.com/InstallAndConnect](https://www.xcelenergy.com/InstallAndConnect). It is then the responsibility of the developer to contact the Designer assigned to the project for approval of design details.

Additional easements will need to be acquired by separate document for new facilities (i.e. transformer) – be sure to have the Designer contact a Right-of-Way and Permits Agent.

As a safety precaution, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 for utility locates prior to construction.

Donna George
Right of Way and Permits
Public Service Company of Colorado dba Xcel Energy
Office: 303-571-3306 – Email: Donna.L.George@xcelenergy.com

Comments on McDonald's

DV-SITE PLAN-23-00016

Mark Pabst

12/30/2023

Overall – The submitted landscape plan is better than most with drippers being included for trees which will enhance their survival. Also, the relative size of trees is indicated which provides a good interference check against other plants and infrastructure.

Trees – Prior to European settlement the only trees in Colorado were cottonwoods which grew along rivers. Europeans introduced trees that they were used to seeing and the result has been the high fatality rate of many trees. CSU has evaluated all the commonly available trees¹ found at nurseries and graded them (A, B, C, D) based on their performance. Below is a partial list of “A” trees that were not used by the designer and should be considered. While the LA has identified mostly “A” trees (see Figure 1) notably there is a “D” tree identified, Purple Robe Black Locust². Several Honey locusts have been provided on Fig. 1 that can be used as a substitute.

Common Name	Scientific Name
Horsechestnuts (Common, Texas, Ohio)	Aesculus glabra, arguta, hippocastanum
Thinleaf Alder	Alnus tenuifolia
Serviceberries (Saskatoon, Shadblow)	Amelanchier alnifolia, canadensis
Cornelian Cherry Dogwood	Comus mas
Hawthorn (Cockspur, Russian, Washington)	Crataegus crusgalii, ambigua, phaenopyrum
Kentucky Coffeetree	Gymnocladus
Chinese Apricot	Prunus armeniaca
European Birdcherry	Prunus padus
Cleavland Select Pear	Pyrus calleryana
Oak (Bur, Chinkapin)	Quercus robur
Linden (American, Littleleaf, Silver)	Tilia americana, cordata, tomentosa
Juniper (Chinese, Medora, etc)	Juniperus chinensis, monosperma, scopulorum
Juniper (Taylor, etc)	Juniperus virginiana
Pine (Pinyon, Limber, Austrian)	Pinus edulis, flexilis, nigra

Tree Islands – The practice of planting trees where the root system is covered by paving causes stress for the tree. Trees can grow in this condition but will struggle since water is inhibited from

¹ *Front Range Tree Recommendation List*, Colorado Nursery & Greenhouse Association, 2010.

² Not cold hardy. Susceptible to borers. Weak wood. Short lived. Not on the City of Longmont “Approved Tree List”.

getting to the entire root system. Use vertical or columnar plants such as upright junipers, Columnar Buckthorn, Siberian Peashrub, etc.

Trees Lawns – On the east and west boundaries of the property are narrow strips that include large deciduous trees planted among turf (Buffer Type A). Essentially a tree lawn. Tree lawns are hard to maintain, environmentally damaging, and waste resources. A short list of tree lawn problems includes -

- Water waste from overspray onto paved surfaces.
- Difficulty watering odd shapes resulting in dead turf.
- Difficult to fertilize without getting fertilizer on paved surfaces (wasting fertilizer).
- Mowers and weed whackers will damage the base of the tree resulting in girdling. The girdling will permit disease and insect infestation which kills the tree. While a buffer of mulch is indicated on the drawings this will, in time, be overgrown by grass³ which brings in the weed whackers.
- To properly maintain the grass regular application of fertilizer and weedkiller is needed, an added ongoing expense that owners seldom want to make. This results in weeds taking over.
- Tree lawns require complicated irrigation systems that require costly annual repairs for leaks and damage from mowers and snow removal equipment.
- Tree roots destroy curbs, sidewalks, and irrigation hardware.

The tree lawn concept provided in the application documents is recreated in cartoon form in Fig. 4. To illustrate how the tree lawn area can be designed to be less wasteful, easier to maintain, and longer lived, three alternatives are presented in Figures 5 to 7. Traditional tree lawns can be replaced with designs that are more in tune with their environments. Figures 8 - 11 show examples of alternative tree lawns.

I question the use of the Longmont Type C turf mix. For 35 years I have been watching the introduction of miracle turf mixes which never do well. Like this example, these mixes are generally clump grasses and a few will become dominant over the years depending on maintenance and soil conditions⁴. The areas where the weaker varieties lived are then overrun by weeds. A better alternative to these clump products would be a cold hardy Bermuda grass (Tahoma 31) which spreads by runners, like bluegrass. Unlike bluegrass it holds up to heat better and requires less water.

Hwy 119 Garden – The planted area north of the store will primarily be seen by passing traffic on Highway 119 going 55 mph and customers waiting for their drive-up order. The design of this area should be scale specific for this situation (large shrubs such as Smith's Buckthorn, Commanche Gooseberry, Pawnee Buttes Sand Cherry, Littleleaf Mount Mahogany, Mock

³ Even when steel edging is used.

⁴ Note that horticultural experts at Fort Collins Botanic Garden and Denver Botanic Garden have given up on these turf demonstration gardens since they are untenable. Additionally, the City of Longmont has not converted its own properties to these mixes so there is no demonstrated existence of their success.

Orange, ect.). Additionally, the turf in this location has no beneficial use⁵. There is an opportunity here to make a breathtaking native garden consisting of native shrubs and grasses that will save the owner in upkeep and maintenance costs. Also see the “Form and Texture” section below. Smaller, more colorful plants could be located adjacent to the drive-thru.

Ornamental Grasses – Surprisingly no ornamental grasses are indicated in the plan. It is true that ornamental grasses are probably overused (especially Karl Foerster) in design today, there are other grasses that are very attractive. Note that Colorado’s state grass is Blue Grama Grass (*Bouteloua gracilis*). Also known as a four-season grass, it is attractive all year.

Form and Texture Garden - Garden areas can be created using plants that are very hardy in our climate and require little water or maintenance. This type of garden is not the typical perennial garden but rather a Form and Texture Garden. These plants would consist of Southernwood, Silver Sage, Sea Foam Artemisia, Hens and Chicks, Pineleaf Beardtongue, Littleleaf Mountain Mahogany, cold hardy cacti, cholla, agave, ice plants, and yuccas.

Bulbs - Colorado has a short growing season so to get color in early spring, bulbs can be used. Crocus, snowdrop, muscari, gregii tulips, etc. are a few examples of low maintenance bulbs. Dwarf iris (*iris reticulata*), willflower iris, and iris holandica are also great smaller iris that don’t have the massive leaves of the hybrid iris and require cutback and division. Hybrid tulips also require division every year to remain healthy and should not be used.

⁵ Turf is beneficial when used as a sports field, picnic area, or pet exercise area. Since turf is one of the most difficult plants to grow in Colorado having turf to just look at is hard to maintain, costly, and a drain on resources (water, fertilizer, weed killer)

PLANT SCHEDULE

CANOPY TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SIZE/CAL.	WIDTH	HEIGHT	
	AP	2	ACER PLATANOIDES 'EMERALD QUEEN' / EMERALD QUEEN NORWAY MAPLE	B & B	2.5" CAL MIN	30'-40'	40'-50'	"B" substitute Bigtooth Maple, bark has to be protected in winter.
	CS	6	CATALPA SPECIOSA / NORTHERN CATALPA	B & B	2.5" CAL MIN	30'-50'	40'-60'	"A"
	RR	8	ROBINIA PSEUDOACACIA 'PURPLE ROBE' / PURPLE ROBE BLACK LOCUST	B & B	1.5" CAL MIN	25'-30'	35'-40'	"D" substitute Honeylocust – Imperial, Shademaster or Skyline. Notes 1 and 2
	TC	12	TILIA CORDATA 'GREENSPIRE' / GREENSPIRE LINDEN	B & B	1.5" CAL MIN	25'-35'	30'-40'	"A"
EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SIZE/CAL.	WIDTH	HEIGHT	
	JM	8	JUNIPERUS SCOPULORUM 'MOONGLOW' / MOONGLOW JUNIPER LOW ROOT DAMAGE POTENTIAL	B & B	6" HGT.	6'-8'	12'-15'	"A"
	JW	11	JUNIPERUS SCOPULORUM 'WICHITA BLUE' / WICHITA BLUE JUNIPER	B & B	6" HGT.	4'-6'	15'-20'	"A"
	PL	6	PINUS LEUCODERMIS 'SATELLIT' / SATELLIT BOSNIAN PINE	B & B	6" HGT.	6'-10'	15'-20'	"A"
DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SPACING	WIDTH	HEIGHT	
	CF	19	CORNUS SERICEA 'FLAVIRAMEA' / YELLOW TWIG DOGWOOD	5 GAL.	SEE PLAN	6'-10'	6'-8'	Best in wet spots
	CF2	2	CHAMAEBATIARIA MILLEFOLIUM 'FERNBUSH' / FERNBUSH	5 GAL.	SEE PLAN	3'-6'	3'-5'	xeric
	CF3	41	CORNUS SERICEA 'FARROW' / ARCTIC FIRE® RED TWIG DOGWOOD	5 GAL.	SEE PLAN	3'-4'	3'-4'	Best in wet spots
	LA	80	LAVANDULA ANGUSTIFOLIA 'HIDCOTE' / DEEP BLUE LAVENDER	5 GAL.	SEE PLAN	20"-30"	20"-30"	
	RSS	23	PEROVSKIA ATRIPPLICIFOLIA / RUSSIAN SAGE	5 GAL.	SEE PLAN	3'-4'	3'-4'	Self sows (weedy), substitute blue mist spirea
	RT	3	RHUS TYPHINA / STAGHORN SUMAC	5 GAL.	SEE PLAN	10'-15'	10'-25'	Vigorous suckering shrub, needs lots of room, substitute Autumn Amber Sumac
	SB3	34	SPIRAEA JAPONICA 'BUMALDA' / BUMALDA JAPANESE SPIREA	5 GAL.	SEE PLAN	2'-3'	18"-24"	Not PlantSelect. See PlantSelect for recommended spireas.
	SJ2	6	SYRINGA X JOSIFLEXA 'JAMES MACFARLANE' / JAMES MACFARLANE LILAC	5 GAL.	SEE PLAN	6'-8'	8'-12'	Not PlantSelect. See PlantSelect for recommended lilacs.
EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT. SIZE	SPACING	WIDTH	HEIGHT	
	AF2	24	ARTEMISIA FILIFOLIA / SAND SAGEBRUSH	5 GAL.	SEE PLAN	2'-3'	1'-5'	Native, xeric
	CS2	18	CYTISUS PURGANS 'SPANISH GOLD' / SPANISH GOLD BROOM	5 GAL.	SEE PLAN	4'-6'	2'-4'	PlantSelect
	EU	13	ERICAMERIA NAUSEOSA GLABRATA / TALL GREEN RABBITBRUSH	5 GAL.	SEE PLAN	2'-6'	2'-6'	Native, xeric
	MA	4	MAHONIA AQUIFOLIUM / OREGON GRAPEHOLLY	5 GAL.	SEE PLAN	4'-6'	4'-6'	Part shade to full shade
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	TYPE	INSTALL RATE	WEED FABRIC	MFR.	
	ROCK	3,334 SF	1-1/2" SCREENED TABLE MOUNTAIN / ROCK MULCH	ROCK MULCH	4"	YES	LOCAL MANUFACTURER	
	ROCK2	785 SF	3/4" BRECKEN GOLD / ROCK MULCH	ROCK MULCH	4"	YES	LOCAL MANUFACTURER	
	SEED	13,826 SF	LONGMONT SEED MIX "C" / LONGMONT SEED MIX "C" PRE-APPROVED IRRIGATED TURF SEED MIX "C": 35% CREEPING RED FESCUE, 25% SR3200 BLUE FESCUE, 12.5% SR3100 HARD FESCUE, 15% RUBENS CANADIAN BLUE, 12.5% SR5100 CHEWINGS FESCUE.	SEED				These are mainly clump grasses resulting in a hummocky turf. Eventually 1 or 2 species will become dominant and weeds will move into the interspaces.

Fig. 1

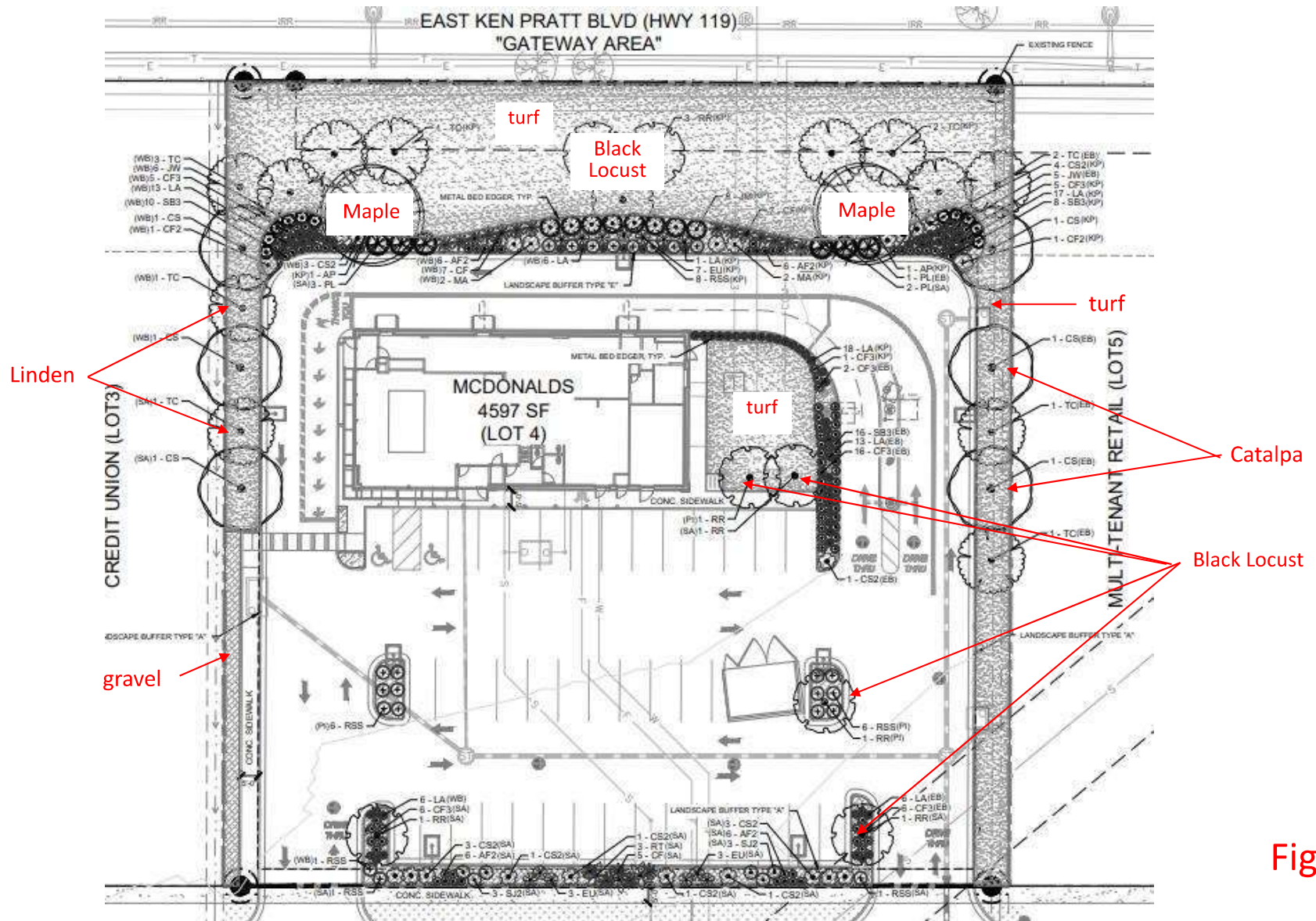


Fig. 2

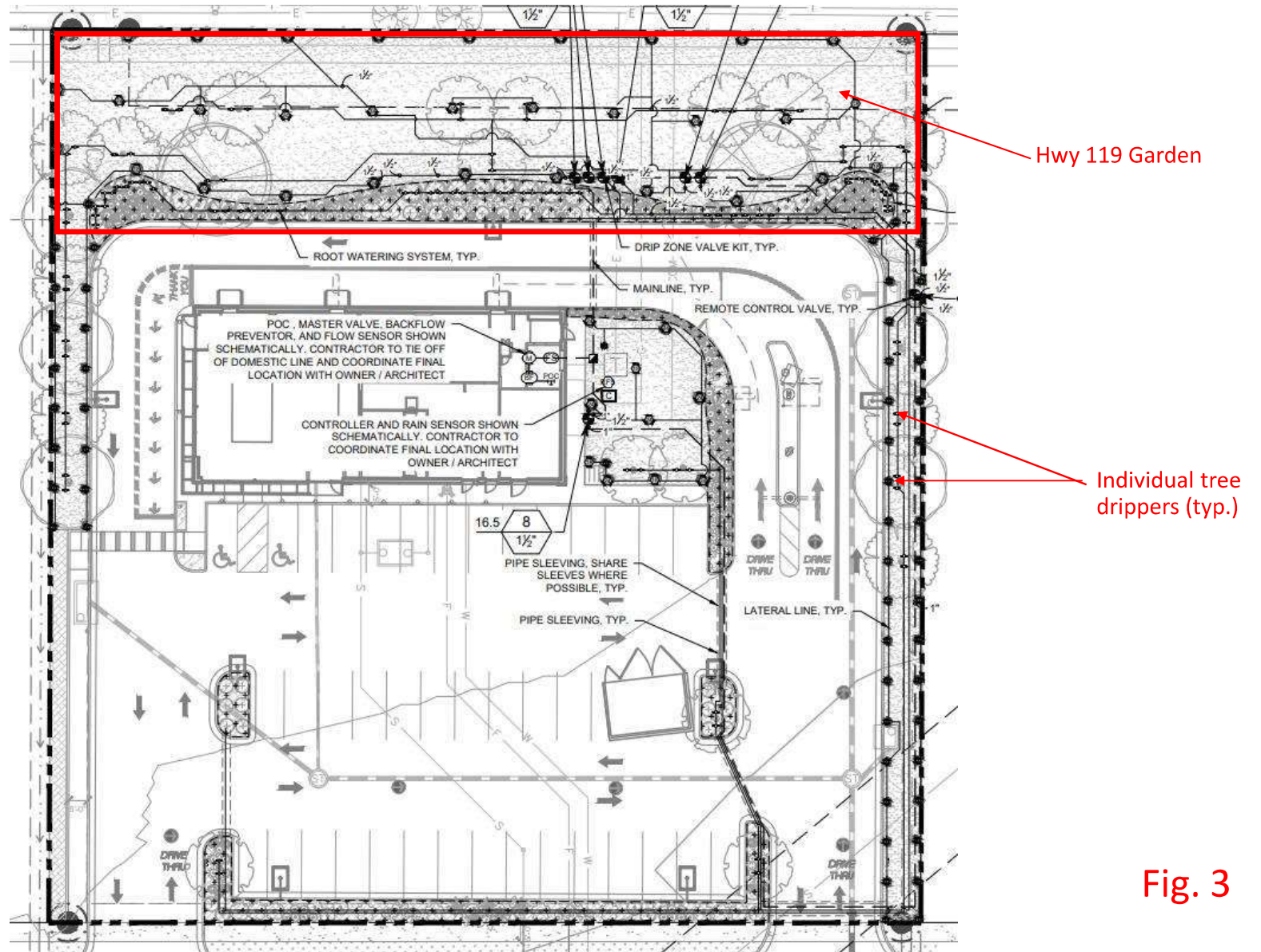
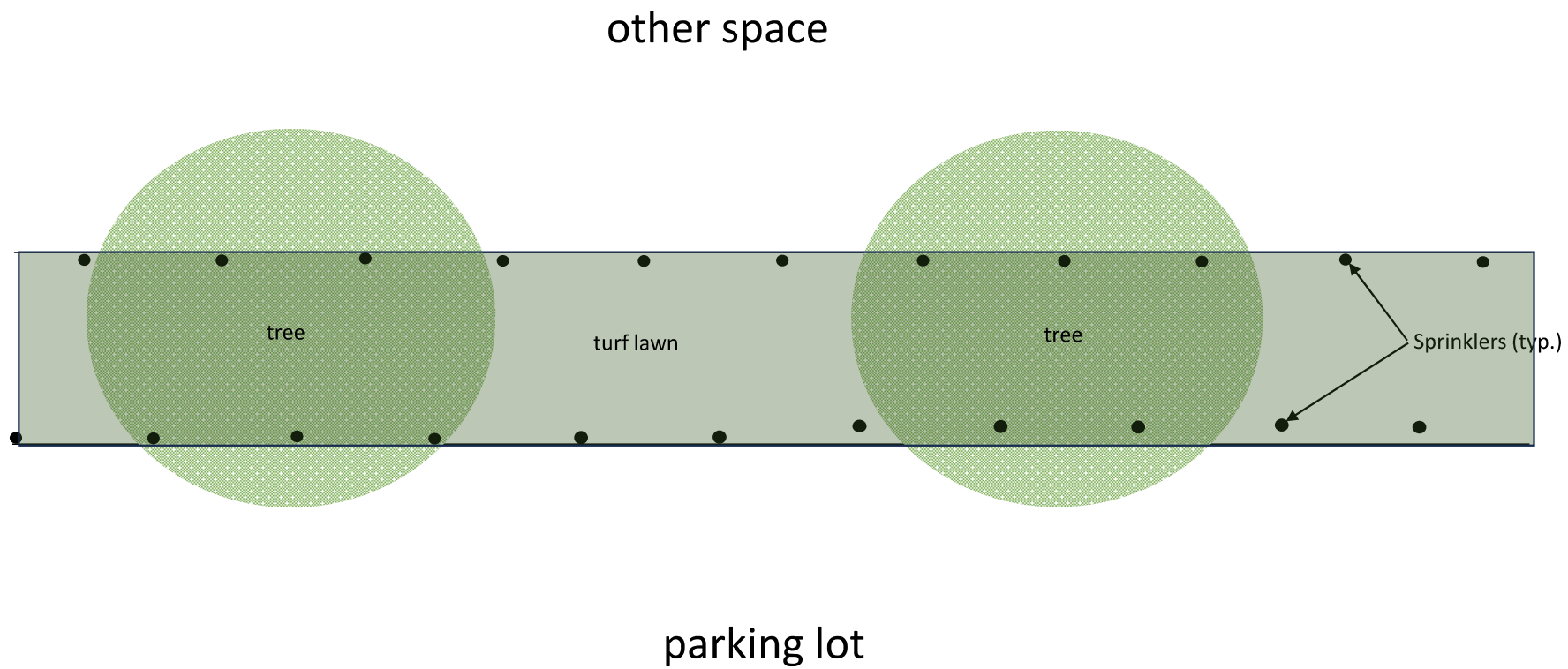
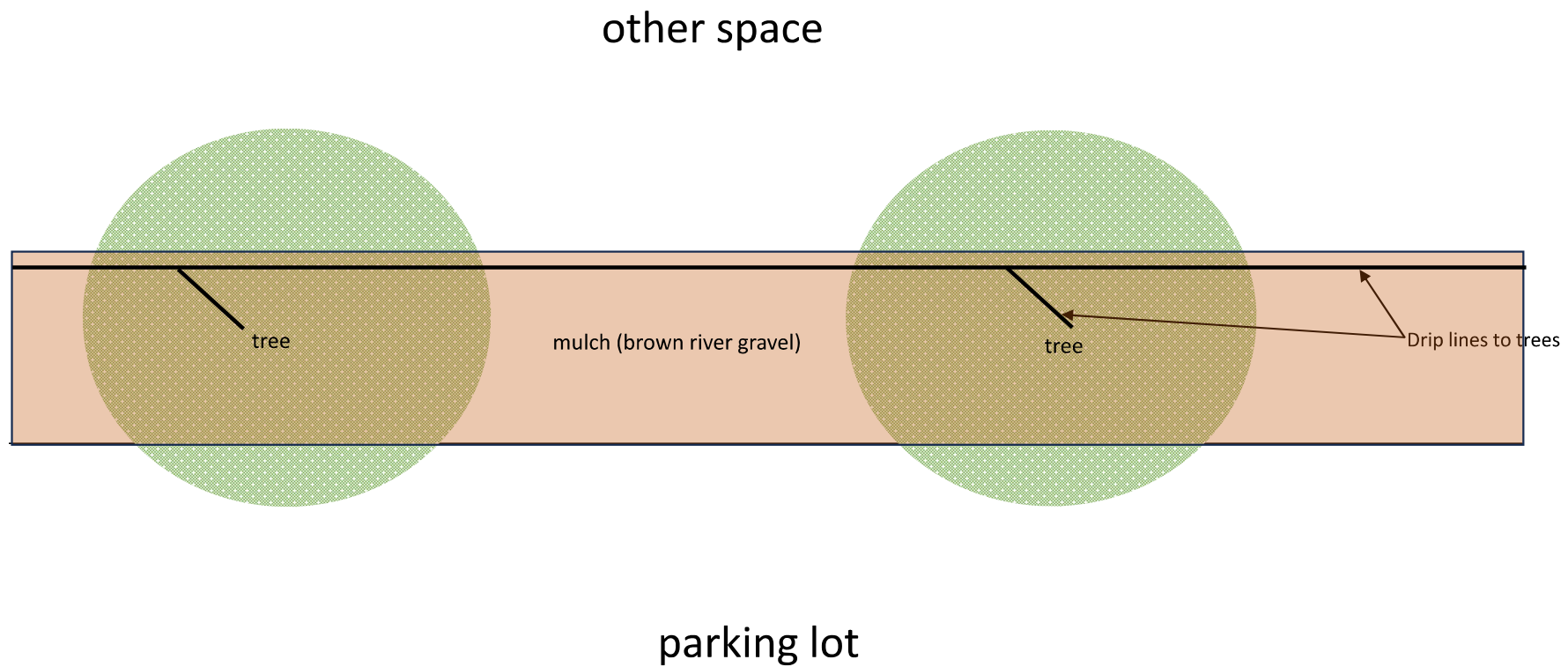


Fig. 3



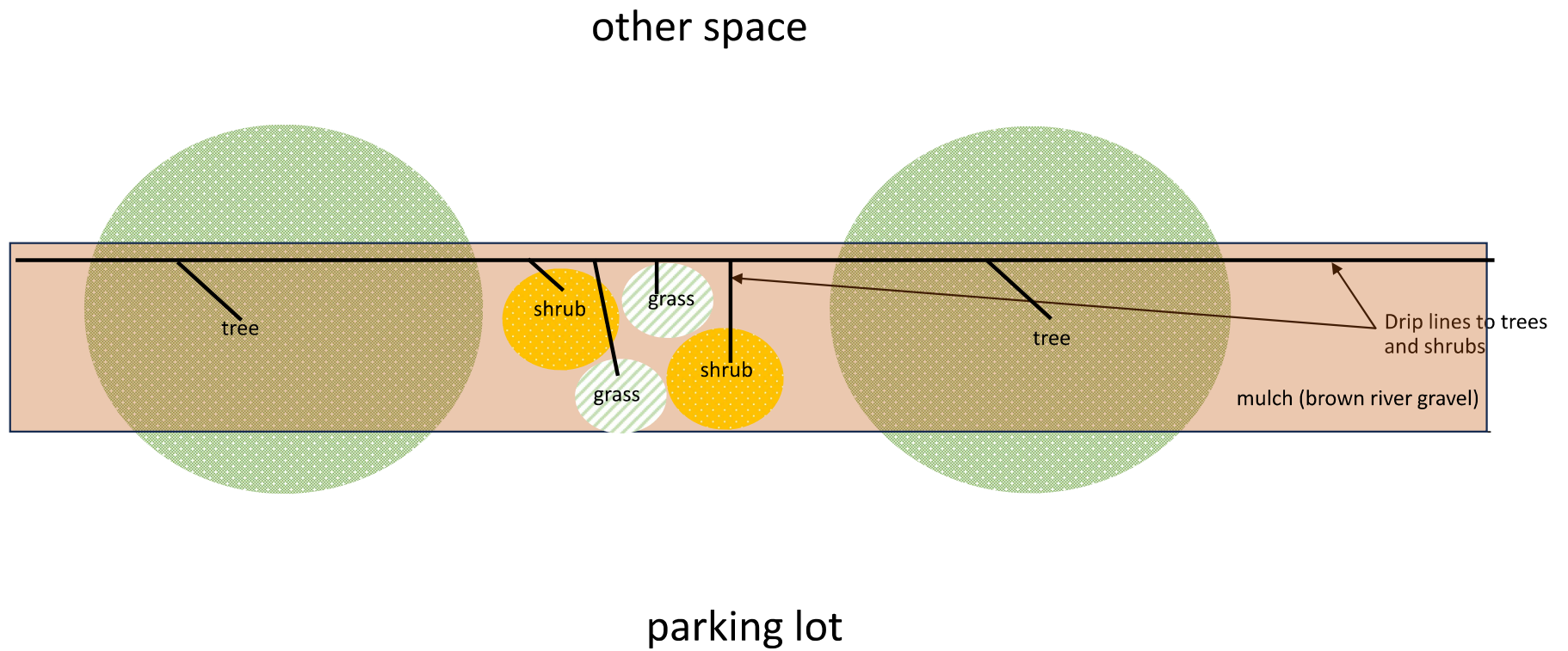
Current Tree Lawn

Fig. 4



Alt 1 – Trees only

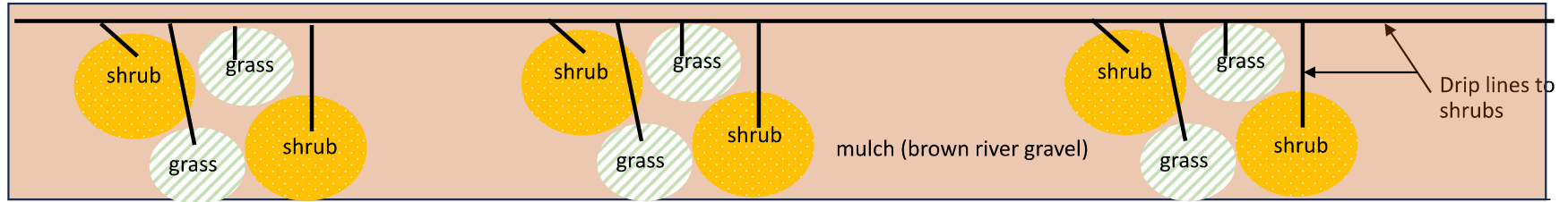
Fig. 5



Alt 2 – Trees w/ shrubs and grasses

Fig. 6

other space



parking lot

Alt 3 – shrubs and grasses

Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11