







Structure Protection Plan







2012





City of Boulder









MAP LEGEND

-  Urban Interface Zone
-  Urban Interface Zone (Outside Boulder city limits)
-  Area 2 Evacuations
-  Units (Multi-colored shades with no outlines)

-  Trail or fire road needs little or no improvement
-  Line needs improvement (Social trail or singletrack)
-  Proposed line location, needs construction
-  Irrigation ditch (May or may not contain water)
-  Interface road (No outlet)
-  Roads that form the Wildland/Urban Interface perimeter

-  Task Force Leader
-  Hand Crew (20-person, 10-person module, or 5-person squad)
-  Type 3-6 Engine (Wildland-Specific)
-  Type 1-3 ENGINES (Wildland-Equipped)

-  Type 1, 2, & 3 Incident Command Post
-  Level 2 Staging

-  Road Barrier
-  Trail Name
-  FIRE LINE NAME Fire Line Name
-  Police Unit
-  Fire Hydrant





Structure Protection Plan

City of Boulder, Colorado

Version 2012.1



A Boulder County Parks and Open Space employee lights a ditch at Hygiene Dairy. PHOTO: Dave Zader

Acknowledgments

- | | | |
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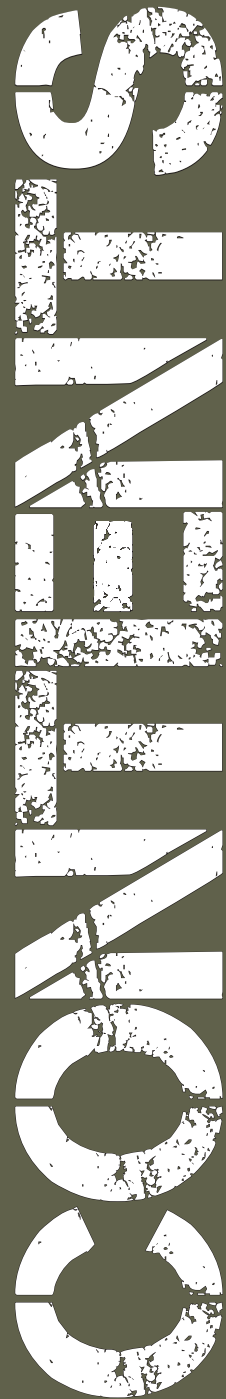
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Introduction

The City of Boulder has an ever-looming threat of wildland fire. This document was produced to assist in the development of objectives, strategies, and tactics in protecting structures in—and immediately adjacent to—the municipal boundary of Boulder. This document also provides guidance on ordering and placement of structure protection resources. This document was designed to be a user-friendly, visual resource for operations personnel. It requires very little training, and should be intuitive to qualified wildland firefighters.

While no document can replace the training, practice, experience, and judgment of qualified fire professionals, this structure protection plan serves as a starting point and provides a common operating picture for all resources assigned to protect structural values within the city. This document also serves to outline contingency actions and resources needed to defend structures.

It is important to remember that these structure protection resources are not the only resources that will be needed during a wildland incident. Every effort should be made to contain the fire in its area of origin. The best way to protect structures is to control wildland fires when they are still small. Resources will need to be shifted between suppression and structural protection duties based on current fire conditions and the judgment of either the incident commander or the operations section chief.

This document is an intelligence packet that assists incident commanders, operations section chiefs, structural protection specialists, division supervisors, group supervisors, taskforce leaders, and strike team leaders in formulating a plan based on current fire conditions, forecasted weather conditions, and available resources. It should not be thought of as a cookbook of what *must be done*, but what *could be done*. Wildland firefighting and structural protection/defense requires judgment based on many years of actual firefighting experience. No amount of classroom training or simulations can prepare an individual for the leadership required during large, fast-moving fires.

Within this document, resource placement and organization are displayed on maps. These placements should not be thought of as static, as resources must remain mobile and available to go where needed.

Resources listed on the maps can be thought of as the resources needed to prep structures, construct hand line, and possibly conduct a burn out operation. Once the flaming front engages the edge of the city or structure fires begin to occur and firefighters are actively engaged in firefighting, additional resources will likely need to be pulled from other areas to assist.

The geographical segments should not be thought of as branches or divisions, but as planning units and zones. The fire organization is dynamic and will need to be built based on the fire's location. It is important to remember that Structure Protection is a “Group” and should never be referred to as a

“division.” Structure protection resources should not be idle while assigned to these groups. These resources need to be actively building or enhancing contingency lines of defense during their deployment.

This document is organized into sections based on four levels of resolution:

- City-wide** City-wide maps provide a broad overview of wildland/urban interface areas.
- Zones** Zone maps show the relationship of planning units to one another.
- Units** Planning unit maps provide depictions of structures, defensible features, and supervision.
- Tactical** Tactical maps provide detailed views of structures, defensible features, water sources, work assignments, suggested resources, and placement.

This document will be updated as the need arises.

Questions concerning this document should be addressed to the City of Boulder Fire Department Wildland Division at (303) 441-3350.



How to Use This Plan

I was once asked if whether training every citizen of Boulder as a wildland firefighter would help protect the city from fire. The answer I came up with is, “not really,” and the reason is *leadership*. Boulder does not lack for numbers of firefighters, but for firefighters qualified to the middle management wildland firefighting positions.

To help explain what we are missing in this leadership model is to think of driving a car. The command and general staff are the steering wheel, looking at the big picture and making decisions. The tool-swinging firefighters are the wheels, giving those decisions traction. The role we cannot adequately fill in this scenario is the middle management; the Division/Group Supervisors and Strike Team/Task Force leaders who are the foot on the accelerators. These are the leaders who make decisions at the tactical level and implement the strategies. They are the key to success. The key to ICS is putting those personnel in place early in the incident. This plan is designed to help do that.

This plan was designed to provide information graphically in order to provide information as quickly and methodically as possible with as little reading as possible. One of its key features is its modular design which allows the use of pieces of the plan based on the fire location. It is intentional that the zones and units are not described in ICS terms. These zones and units are planning areas that should be group together during an incident so that portions of the plan can be used rather than the plan as a whole. This allows an *à la carte* approach to development and ordering of resources. Each unit* was designed around the ICS span of control and an ICS Structure Group Supervisor should be assigned as needed. Each zone was designed around the ICS Branch Director.

For example, if a small fire starts and is threatening one unit, one structure group supervisor and a few (2-3) task force leaders will be needed to supervise the structure protection resources. In contrast, if a large fire is threatening four units (these four units could be spread across the plans' zone boundaries), one structure protection branch director, four structure group supervisors, and 8-12 task force leaders would be needed to supervise the structure group resources.

It is important to realize that a simultaneous wildland suppression effort will be conducted during structure protection operations. The hope is that structure protection efforts will only be contingency actions. However, it is important to understand that action cannot be taken too early when constructing the defensive features outlined in this plan.

This plan breaks the city of Boulder's wildland/urban interface into four zones: South, South Central, North Central, and North. These zones are based on topographic features and major road locations. The central dividing line is Boulder Canyon with two zones to the north and two to the south. Each zone contains three to four units. Within each unit, one to three tactical areas are defined with task assignments and resources required to accomplish those tasks.

At the beginning of an incident, it is important that the IC establish good

* Some exceptions exist in Unit 4.

LEGEND: See inside front cover

North Zone

North Central Zone

South Central Zone

South Zone

Overview Map

Bird's Eye View



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Image U.S. Geological Survey

overhead leadership and grow the incident organization by placing leadership first and assigning resources to that leadership as needed. Upon arrival to a wildland fire, it is wise to immediately assign a *mobile* operations section chief who can be the eyes for the IC. This allows the IC to remain in a fixed location. A Level Two Staging Area should be immediately designated and the first-arriving unit should assume the staging manager position. The operations section chief should determine the number of planning units threatened and order resources based on the fire's **potential, not current**, size.

Organized resource mobilization early in the incident is critical to success. Early ordering and staging is preferred and safer than ordering and sending units straight to the field upon arrival. The operations section chief should assign division supervisors to the fire's geographic areas as needed to support span of control of the suppression resources. Structure protection group supervisors should be assigned to each planning unit along with task force leaders to provide for a manageable span of control.

Filling the Organization With First-Arriving Units

Obviously, mobilizing qualified resources takes time. A critical step in the management of incoming resources is to use initial, first-on-scene resources to provide needed points of contact and leadership. The first company officer must assume the role of the middle management leadership and organize incoming resources. The first-arriving officer to a unit assumes the role of structure group supervisor until relieved by a more qualified resource, at which time a transition briefing should occur. The relieved company officer can remain as a trainee or return to his/her company. The first-arriving company officer assigned to a tactics area becomes the task force leader until he/she is relieved by a more qualified resource. This system ensures a defined leadership and coordination is supported.

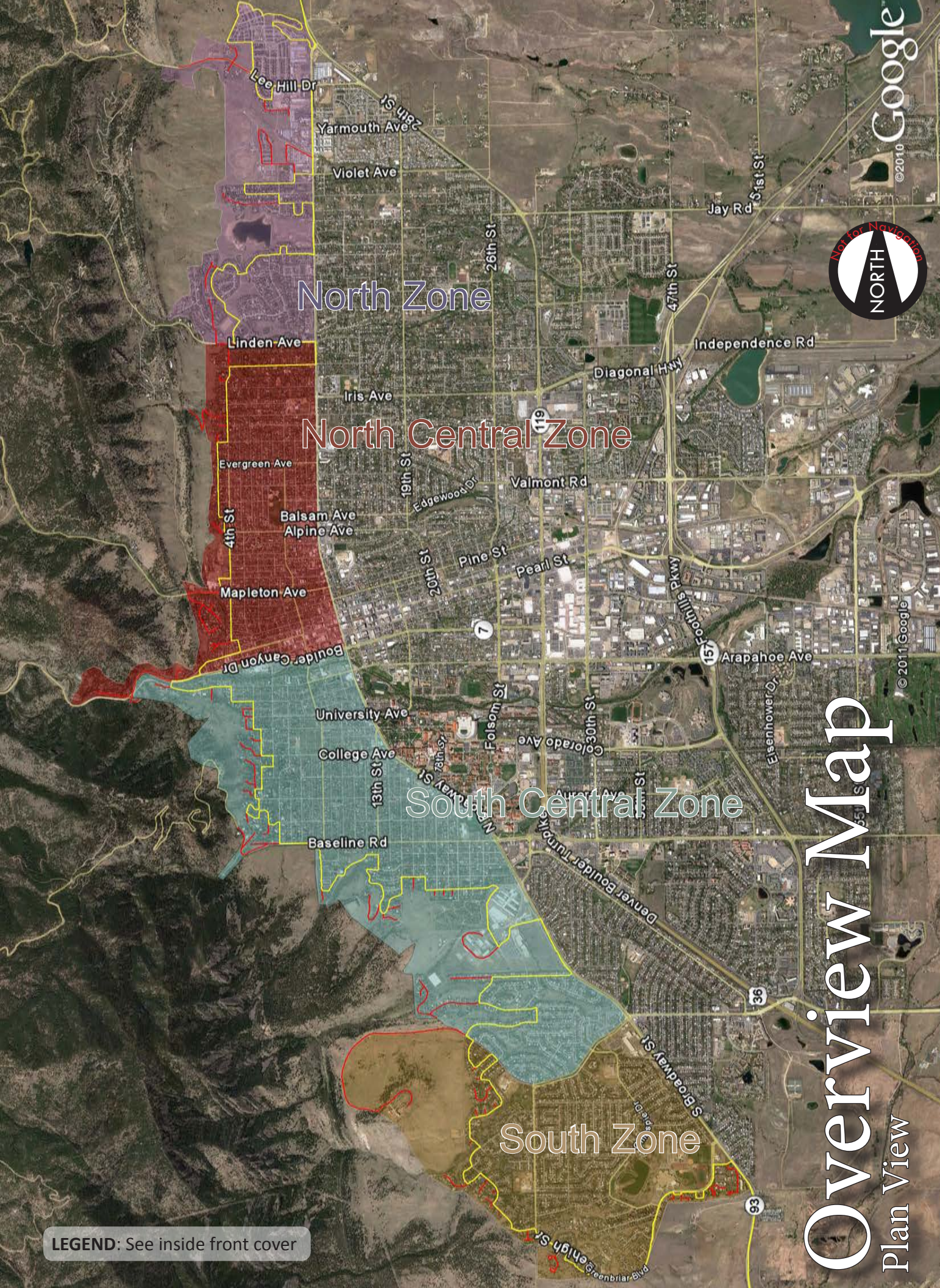
Evacuation and Notification

Terminology

- **Notification** Residents *advised* of fire in area
- **Voluntary Evacuation** Residents *encouraged to evacuate* area due to potential fire threat
- **Mandatory Evacuation** Residents are *required to leave* structures threatened by fire

Evacuation Areas

- **Area 1 (Orange Polygons)** Residences immediate threatened by fire due to lack of city streets between structures and fuel
- **Area 2 (Red-bordered Polygons)** Residences located along one-way evacuation routes and those nearest wildland fuels
- **Area 3 (Solid-colored Polygon)** Any residence west of Broadway within Unit
- **Initial Primary Mandatory Evacuation Areas** are indicated by orange polygons on the Unit and Task Force maps. These should be evacuated by initially-arriving units. Entire zones or units should be evacuated as a whole. Evacuation decisions should be made based on fire conditions. Areas 1, 2, and 3 are indicated by colored polygon units.



Overview Map

Plan View

LEGEND: See inside front cover

Coal Creek Cyn

Boulder Cyn

Magnolia Rd

Gross Reservoir

Gross Dam Rd

Kossler Lk

Flagstaff Rd

South Boulder Pk

Bear Pk

Green Mt

Flagstaff Mt

Shadow Cyn

Bear Cyn

Skunk Cyn

5th 4th

Flatirons

Gregory Cyn

South Central Zone

South Zone

2

3

1

4

5

6

7

93

S Broadway St

157



S Boulder Rd

Baseline Rd

N 60th St

Units Overview Map

Bird's Eye View

Sugarloaf Rd

Lefthand Cyn

Fourmile Cyn Dr

Sunshine Cyn Dr

Boulder Heights

Mt. Sanitas

Pinebrook Hills

North Zone

North Central Zone

119

8

9

10

11

12

13

7

Canyon Blvd

36

28th St

Dagonal Hwy

Footnills Pkwy

Arapahoe Ave

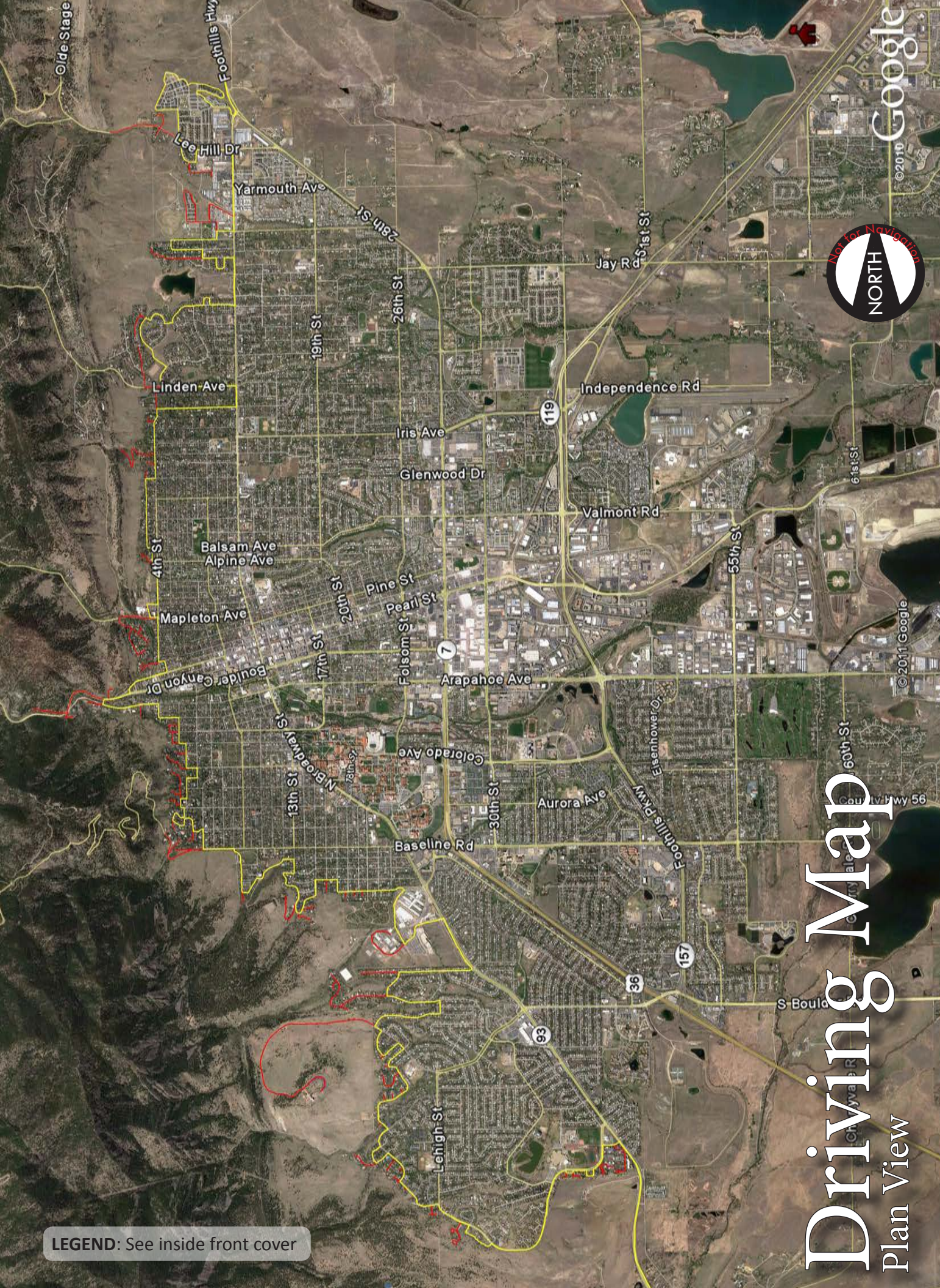


Vailmont Rd

INCIDENT RADIO COMMUNICATIONS PLAN		Incident Name	Date/Time Prepared				Operational Period Date/Time				
PREPLAN			Sep-11								
Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	TX Tone/NAC	Mode A, D or M	Remarks
1	COMMAND	5 VTAC 17 Rpt	COMMAND	161.8500	(N)	156.7	157.25	(N)	156.7	A	COMMAND TRAFFIC
2	COMMAND	5 Red 6 Rpt	TRANSITION / BACKUP	153.7700	(N)	131.8	154.3700	(N)	131.8	A	IA COMMAND TRAFFIC
3	DISPATCH	5 Red 1 CR	COUNTY	154.3250	(N)	179.9	154.2200	(N)	141.3	A	DISPATCH CENTER
4	TACTICAL	5 A VTAC 11	ALPHA	154.4525	(N)	CS	154.4525	(N)	CS	A	
5	TACTICAL	5 Z VTAC 12	ZULU	151.1375	(N)	CS	151.1375	(N)	CS	A	
6	TACTICAL	5 B VTAC 13	BRAVO	158.7375	(N)	CS	158.7375	(N)	CS	A	
7	TACTICAL	5 Y VTAC 14	YANKEE	159.4725	(N)	CS	159.4725	(N)	CS	A	
8	TACTICAL	5 C VFIRE 24	CHARLIE	154.2725	(N)	CS	154.2725	(N)	CS	A	
9	TACTICAL	5 X VFIRE 26	X-RAY	154.3025	(N)	CS	154.3025	(N)	CS	A	
10	TACTICAL	5 SG1 VFIRE 23	STRUCTURE GRP 1	154.2650	(N)	CS	154.2650	(N)	CS	A	
11	TACTICAL	5 SG2 VFIRE22	STRUCTURE GRP 2	154.2950	(N)	CS	154.2950	(N)	CS	A	
12	MEDICAL	5 VFIRE 21	MEDICAL TACTICAL	154.2800	(N)	CS	154.2800	(N)	CS	A	
13	USFS DISPATCH	5 RNF GUNB	FOREST SERVICE	169.9750	(N)	CS	169.1750	(N)	103.5	A	
14	COORDINATION	5 Red NW	800 TO VHF	155.2500	(N)	110.9	155.2500	(N)	110.9	A	inbound resource coordination
15	AIR TACTICAL	5 Air/ Grn 7	AIR TO GROUND	166.8500	(N)	CS	166.8500	(N)	CS	A	
16	CREW	5 BFD CREW	WILDLAND DIVS	163.050	(N)	CS	155.2500	(N)	110.9	A	
17											
18											
19											
20											
Prepared By (Communications Unit)		Incident Location		CO		Latitude		N 40 00'0"		W 105 20'0"	
		Boulder									

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

LEGEND: See inside front cover



Driving Map

Plan View



Google
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INTRODUCTION

NORTH ZONE

NORTH CENTRAL ZONE

SOUTH CENTRAL ZONE

SOUTH ZONE

APPENDIX

Resource Ordering

Suggestion List

Unit	DIVS	FLD	ENGINE, TYP 1-3, 3	ENGINE, TYP 3-6, 3	PERSON	CREW 20	PERSON	MODULES	10 PERSON	SQUADS 5	PERSON	1.5" NH HOSE X 100'	1.5" NH WYES	1.5" NH TO 1 NP5H REDUCERS	1" NP5H HOSE X 100'	1" NP5H NOZZLES	SPRINKLER KIT	PORTA PONDS	MARK 3 KIT	TOTAL PERSONEL	
1	1	2	6	4	4	1	1	0	0	0	0	10	5	5	5	5	0	0	0	0	53
2	1	3	15	2	2	1	1	0	0	0	0	50	25	25	25	25	0	0	0	0	74
3	1	3	13	4	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	74
4	1	1	7	1	1	0	0	0	0	1	1	15	8	8	8	8	0	2	0	0	30
5	1	3	16	9	9	1	1	0	0	1	1	27	14	14	14	14	0	2	0	0	103
6	1	3	7	5	5	1	1	0	0	0	0	25	13	13	13	13	0	0	0	0	59
7	1	3	18	2	2	1	1	0	0	0	0	18	9	9	9	9	2	2	2	2	83
8	1	3	10	5	5	1	1	0	0	0	0	20	10	10	10	10	0	0	0	0	68
9	1	2	10	2	2	1	1	0	0	0	0	20	10	10	10	10	0	0	0	0	58
10	1	2	10	3	3	1	1	0	0	0	0	20	10	10	10	10	0	0	0	0	61
11	1	3	17	3	3	1	1	0	0	0	0	16	8	8	8	8	0	0	0	0	83
12	1	2	9	5	5	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	49
13	1	2	7	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Total	13	32	145	48	48	11	11	0	0	3	3	221	112	112	112	112	2	6	2	847	
Fire Size																					
Small	1	4	16	5	5	1	1	0	0	0	0	25	12	12	12	12	0	1	0	0	94
Average	2	5	24	8	8	2	2	0	0	1	1	37	19	19	19	19	0	1	0	0	141
Large	3	8	36	12	12	3	3	0	0	1	1	55	28	28	28	28	1	2	1	1	212
Huge	4	10	44	14	14	3	3	0	0	1	1	66	34	34	34	34	1	2	1	1	254
Catastrophic	7	16	73	24	24	6	6	0	0	2	2	111	56	56	56	56	1	3	1	1	424

General Description of the Area

Fire Occurrence

Peak fire season is typically June–September with July having the greatest fire occurrence. Lightning is the primary ignition source during this period. Therefore, lightning safety must be addressed. Dry thunderstorms typically develop in June but bring little precipitation. Monsoonal moisture usually moves into the area in late July, reducing the potential for lightning-caused fire activity. Winter often produces cured fuels and high winds which can result in large fires.

Weather

Anticipate changes and utilize spot forecasts. The city of Boulder is covered by Fire Weather Zones 215 and 239. A RAWS station in the area will broadcast warnings when fuel temperature, RH, or winds reach critical thresholds. Temperatures in the lower foothills may reach 105 degrees in June, July, and August, and 15 degrees cooler at higher elevations. Relative humidity in the single digits and night-time recoveries may be minimal. The City experiences a drying trend September through January. Chinook winds (50-100 mph) from the west occur in the fall and winter. Significant snow may fall in the high mountains in September. Snow at lower elevations melts; fuels dry quickly, and in combination with strong winds can create a very active fall and winter fire season. Historically, the largest fires in the area occur in the late fall to early spring.

If there is one word that characterizes the weather of Boulder County, it's *variety*. Boulder County owes its dramatic weather to a combination of circumstances.¹

Mid-Latitude/Mid-Continent

To begin with, Boulder County sits in the mid-latitudes—a place known around the globe for severe weather as a result of the jet stream and the associated cold fronts from the north mixing with warm fronts from the south. Secondly, the plains to our east provide a broad, flat swath of nearly featureless terrain that allows these two air masses to interact unimpeded by topography. We experience much of the results of this interaction up close and personal due to our proximity to the plains.

Proximity to Continental Divide

The terrain in Boulder County has a steep topographical gradient from the Continental Divide to the plains, placing us near enough to be affected by systems moving in from the west.

Our Highland Continental Climate is characterized by:

- Large seasonal and diurnal temperature gradients
- Low humidity
- Fewer clouds and lots of sunshine
- Low precipitation levels

Topography is the number one driver of weather in Boulder County.

Air Masses

Warm fronts from the southwest bring dry, warm temperatures and can often

¹This portion of the weather section adapted from the Boulder County Fire Management Plan.

increase the fire danger in Boulder County. **Cold fronts** that move in from the north move easily down the plains, but “stall” as they try to climb up over the mountains and become stationary over Colorado. When this happens, Boulder County will experience prolonged periods of extreme cold. A stationary front line extending from the northwest corner of the state to the southeast corner is a sign of a stalled cold front. **Maritime Polar** fronts will produce relatively frequent storms and light to moderate snowfall. These fronts generate most of our early and midwinter snowfall. Snowfall and precipitation is greatest on the western slope while eastern Boulder County rarely receives moisture from these systems. **Maritime Tropical** systems originating in the Gulf of Mexico may produce upslope conditions on the Front Range March through May. Many of these systems are very shallow at 2000’-3000’ thick. **Maritime Tropical** systems from the Pacific/Baja area may produce heavy Front Range snowfall in the winter if conditions are right (i.e. low pressure over western Colorado moving east or the jet stream hooking under Colorado and back north over the plains.) Otherwise, the Front Range may be missed by these systems.

Downslopes & Upslopes

An upslope in Boulder County is an air mass moving in a generally westerly direction against the Front Range. Upslopes can result from either tropical air masses moving in from the Gulf of Mexico or from continental air masses moving in from the north. As air masses move up over the foothills, they wring out their moisture on the plains and foothills of Boulder County. The hallmark of an upslope storm is the foothills inundated with precipitation while the mountains to the west remain relatively dry.

Upslopes in Boulder County can be caused by a **high pressure system sitting over the northeast portion of the state**. The clockwise flow off the high (specifically, the winds at the high’s 7 and 8 o’clock), are flowing in a westerly direction (out of the east) when they contact the Front Range, causing the upslope conditions. Upslope conditions can bring rain and snowfall to the foothills and eastern Boulder County.

Conversely, a **low sitting in about the same location** will batter the Front Range with its counterclockwise winds at its 7 or 8 o’clock. While this system may cause moisture at its center and over Nebraska, the effect of the **downsloping Bora winds** on the foothills of Boulder County can be dry, windy, and relatively warm weather.

The **take-home lesson** is that nearby lows can sometimes produce warm, dry, and windy weather, while a nearby high can sometimes produces ample snow and rain—the **opposite of what is expected** from these two pressure systems.

More in line with our expectations, a **low pressure system to our south** can also produce upslope conditions on the Front Range, pulling moisture in from the Gulf of Mexico or the Pacific. When the low is to the southeast of us, in the vicinity of Lamar and La Junta, its counterclockwise winds will be contacting the Front Range at a 90 degree angle.

Rain Shadows

Indian Peaks

The Indian Peaks rain shadow is formed by the band of 12,000’+ peaks which form the entire western boundary of Boulder County. Pacific systems moving in from the west encounter the Indian Peaks as they enter Boulder County, losing much of their moisture west of the divide and on high-elevation eastern slopes. Therefore, the

western portions of Boulder County above 8500' are significantly wetter than the eastern portions. Portions of Boulder County lying below 8500 feet are most affected by this rain shadow.

Rabbit/Steamboat Mountain

Rabbit and Steamboat Mountains form a rain shadow on Hall Ranch and the Lyons area. Polar air masses moving in from the north clock around to the west/northeast when they interact with the terrain formed by Rabbit and Steamboat mountains. The air moving westward wrings out its moisture on Rabbit and Steamboat, leaving Hall Ranch drier than neighboring terrain to the east. The result is a drier microclimate. Vegetation at Hall Ranch will therefore differ from the vegetation found at the same elevation directly to the south at Heil Valley Ranch. This potentially leads to a higher historical fire frequency in the affected area.

Precipitation

Due to **altitude** and **distance from any significant body of water**, Boulder County is very dry. About every 20-30 years, Colorado experiences a drought that lasts several years.¹³ Typical summer humidities range from 35-68%, while wintertime humidities range from 48-63%.¹⁴

North American Monsoon (aka “Southwest Monsoon,” or “Mexican Monsoon”) Boulder County is affected yearly by the North American Monsoon, a synoptic wind shift caused by a large high in the Four Corners area moving eastward toward Texas, shifting winds in the southwest to a more southerly direction. In addition, a thermal low near Yuma, Arizona assists with drawing moisture up from the Gulfs of Mexico and California. The National Weather Service in Arizona has declared that our monsoon “officially” occurs each year beginning on June 15th and ending on September 30th. Our summer monsoon *typically* occurs between **mid July and early September**, peaking in late July to early August. Though rare, the monsoon has been known to last into October.

Our monsoon is the flow of moist winds across Mexico, Arizona, and New Mexico. It **does not result in a long period of rain**, but rather is characterized by a **pattern of “burst” and “break” in rainstorm activity**. What you will most likely observe is a daily afternoon buildup of clouds, thunderstorms, and possibly rain. Our monsoon season is typically characterized by **frequent lightning-caused fire starts**.

Average Temperatures & Precipitation (Boulder)

MONTHLY AVERAGES ¹⁶	High (F)	Low (F)	Rainfall (in.)	Snowfall (in.)
January	46	21	0.69	10.7
February	48	24	0.77	10.9
March	54	28	1.76	17.8
April	63	36	2.45	11.7
May	72	45	3.04	1.5
June	82	53	2.17	0
July	88	59	1.82	0
August	86	57	1.65	0
September	78	49	1.61	1.5
October	67	40	1.30	5.0
November	53	29	1.21	13.3
December	47	23	0.67	10.2
TOTALS			19.14”	82.7”

Wind

Why is Boulder so *windy*? Our wind is due in part to our proximity to the Continental Divide. The city of Boulder and the foothills surrounding it sit a mere 20 miles from the divide. The wind associated with weather systems pushing up and over the western side of the divide encounter relatively little terrain to disrupt their flow before reaching Boulder.

Our *strongest* wind events typically occur in January and December, while April is our “windiest” month for *frequency* of wind. A study of our **largest fires reveals that most are wind-driven, wintertime events.** The strongest winds we experience here will come from the south and south-southwest. The second strongest winds come from the north.

Chinook Winds

Chinook winds can form in Boulder County when a high pressure system is sitting to the west of the Continental Divide with a low to our east, a stable layer is sitting over the Front Range, and the jet stream is oriented northwest to southeast. The greater the difference in pressure between the low on the lee side and the high on the windward side (the pressure gradient), the more forceful and rapidly the high pressure will flow to the low pressure. In Boulder County, Chinook winds occur down the eastern faces of the Front Range. Wind speeds generally peak right before sunrise and subside by 10:00 or 11:00 am. Chinook winds have been known to reach up to 143 miles per hour and regularly reach 70.

What sets up a Chinook event

- Steep pressure gradient
- Stable layer of air over the Front Range
- Strong jet stream oriented northwest to southeast

What to expect during a Chinook wind event:

- Stationary, cumuliform “crest cloud” formation west of the Divide. Cloud may appear “wall like” or “billowy”
- Mountain wave or rotor cloud development over Flatirons preceding event
- A sharp pressure drop will occur generally 30-60 minutes prior to wind event
- Persistent, gusty wind
- Drastic increase in air temperature; potentially 20-40 degrees in a matter of minutes¹⁹
- Significantly decreasing humidity; often below 10%
- Snow sublimation
- Gusts exceeding 70 mph are common

Bora winds

Bora winds are cold, dry, downsloping winds originating in the northwest. Bora winds and Chinooks are both downsloping winds, but the Bora winds are cold and will not produce the compressional heating seen with Chinooks, which are warm. They are usually behind a strong cold front and abundant in fall and spring. Bora winds will affect a larger area than Chinooks but are not as strong. Typical gusts range from 50-70 mph.

Mountain & Valley Winds

Mountain and valley winds are localized, diurnal wind patterns caused by surface heating and topography. Sun heating the upper regions of slopes in the mornings causes that air to rise, drawing air up the slopes and up-valley. Night time cooling causes air to sink back down slope and down-valley.

El Niño/Southern Oscillation (ENSO)

The ENSO is a 3- to 7-year cycle of warming and cooling of the waters in the equatorial Pacific which affects weather around the globe by affecting the location and intensity of the jet streams. A warming cycle is considered an “El Niño” event while a cooling cycle is considered a “La Nina” event.

Dangerous Combinations

While La Nina years produce conditions typical of high fire danger, the drought conditions sometimes associated with La Nina alone do not correlate with active fire seasons on Colorado’s Front Range. A much higher likelihood of an active fire season is predicted by several years of high moisture availability *preceding* a La Nina event. This is because the increased moisture availability contributes to an increase in fine fuel loads. Much more dangerous than a La Nina event alone, therefore, is a strong La Nina event *preceded* by a strong El Niño event.

Interagency Cooperation

Federal cooperators, paid and volunteer fire departments, the Colorado State Forest Service, the National Park Service, and county agencies will respond to IA fires in the area. County Sheriff offices play a large role in Colorado and Unified Command may occur even on small fires with two or more jurisdictions. There are numerous fire protection districts with a variety of capabilities and equipment. Some lack formal NWCG Incident Qualification Cards. Most of the volunteer firefighters have limited availability during extended attack. Fires may be tactically simple, but complexity is elevated due to heavy resource commitment and media presence. Mutual Aid agreements preclude any exchange of funding for at least 12 hours. The mutual aid period in Boulder County is 12 hours or midnight of the first operational period. USFS resources respond up to 2 miles from the national forest boundary in support of mutual aid. The Boulder County Sheriff’s Office maintains a wildfire response. A deputy or emergency services coordinator may respond for the County. Most county sheriffs are authorized to expend their counties’ funds to order suppression resources, including aircraft.

Interagency Fire Dispatch

Fort Collins Interagency Wildfire Dispatch (FTC) is located at the Forest Supervisor’s Office at 2150 Centre Avenue, Building E, Fort Collins, CO, 80526. [(970) 295-6800] FTC dispatches all IA on the National Forest, Rocky Mountain National Park, and BLM lands using the “closest forces” concept. FTC dispatches all aviation resources in the Zone (regardless of jurisdiction) for local, regional, and national mobilizations. FTC is staffed 7 days a week 0800–1800 from mid-May to mid-October. FTC broadcasts general fire weather in the morning and fire weather with local indices in the afternoon over the ARF frequencies. County resources, fire departments, and volunteer fire departments are dispatched through county dispatch centers.

Staffing

City of Boulder Wildland Fire Management Resources:

Fire Department, Wildland Division

Staffed on a 40 hour/week schedule

Three permanent headquarters staff, most qualified to Division Supervisor (DIVS) and Helicopter Manager (HMGB) or higher

Five seasonal staff, most qualified as National Wildfire Coordinating Group (NWCG) Firefighter Type 1 (FFT1) or higher up to DIVS

Fire Department, Wildland Team

15-person wildland team is required to maintain NWCG Firefighter Type 2 (FFT2) qualification, with some members qualified to the DIVS level.

Fire Department, Emergency Services Division

Resources staffed 24 hours a day, with shift change at 0700.

Most have had some form of basic wildland training. All firefighters hired after 2005 are required to maintain NWCG FFT2 qualification.

Open Space Mountain Parks

OSMP is staffed by rangers 10 hours a day, 7 days a week

16 LEO rangers are required to maintain FFT2 qualification, with some qualified to the level of Engine Boss (ENGB).

Several other personnel within the department qualified as NWCG FFT2s.

Fuels, Fire Behavior, & Fire Occurrence

A variety of fuel types are present in the zone and are due to elevation differences. Typically, ponderosa pine with grass understory is found at lower elevations. This fuel type exhibits the most aggressive burning, even at night. Most development and W/UI exists here. Above 7500', closed canopy, mixed conifer stands become more prevalent. Fire occurrence here is lower and fire behavior is reduced. At 8500', lodgepole pine becomes common. Fire occurrence here is rare and does not usually present control problems unless drought and wind are involved. Elevations above 9500' are predominantly short-needle conifers or a spruce-fir fuel type. At approximately 11,500' is tree line and the tundra begins. Fire occurrence here is very rare. Most fire in this zone is suppressed at class A or B. Larger fires commonly have winds which determine rate and direction of spread. Areas of Douglas fir or ponderosa pine, understory, or overstocked "dog-hair" stands may behave like a brush fuel model.

Local key thresholds:

ERC*	>63
RH	<20%
Temperature	>75°F
20 ft. winds	>12 mph
1000-hour fuel moisture	<12%

*Average 90th percentile measured at the Sugarloaf (70), Pickle Gulch (58), Corral Creek (61) RAWS

Fire Weather Zones

215, 239

Topography & Local Influences

Drainages generally run west to east and sometimes inhibit fire spread north or south. Ridgetops can sometimes aid in fire control as many exhibit rocky outcrops that may serve as natural barriers. Steep slopes greater than 100% are present throughout the area. Up-valley, up-canyon diurnal winds may be relatively strong and persistent at lower elevations. Down-valley, diurnal winds at night may be anticipated. Some fire spread may be slope driven. Night operations can be particularly hazardous due to the rugged terrain. Many of these canyons have swift-moving creeks that may present drowning hazards during high water.

Tactical Limitations

- Dozers and mechanical equipment can be used when essential to meet suppression objectives, but with due consideration to impacts on Open Space and Mountain Parks character. **Dozer use Requires OSMP Approval.**
- Helicopters are restricted to natural landing sites when available and will not occur in sensitive sites identified by the resource advisor.
- Type 1 helicopters may be required to dip out of separate sites than Type 2 or Type 3.
- Motor vehicle and heavy equipment use is limited to existing roads under most conditions.
- Water drops are preferred over fire retardant.
- Fireline will be located to take advantage of natural barriers, rock outcroppings, trails, streams, etc.
- Firelines will be no wider than necessary to stop the spread of the fire.
- Burning snags will be felled only when they threaten to fall across the fire line or threaten the safety of firefighters. Otherwise, they will be allowed to burn down naturally.
- Low stump heights will be used on any trees removed in the suppression effort. Flush cut at or below ground level.
- Bucking of windfall in building fire line shall be minimized. Where bucking is done, saw cuts will be aligned away from trails or other travel corridors.
- Limbing along the fire line will be done only as necessary for suppression efforts or firefighter safety.

Logistical

- Avoid all sensitive areas as identified by the resource advisor.
- All garbage will be packed out.

Rehabilitation

- Control lines will be backfilled and scarified.
- Water bars will be installed and drain dips constructed to minimize erosion.
- Stumps will be flush cut and covered with soil, moss, etc.
- Position felled/bucked material so as to be least noticeable to visitors and camouflage where possible.
- All flagging, equipment and litter will be removed.
- Helispots will be restored using native materials.

Dakota Ridge Subdivision to Linden Avenue

Units

11

12

13

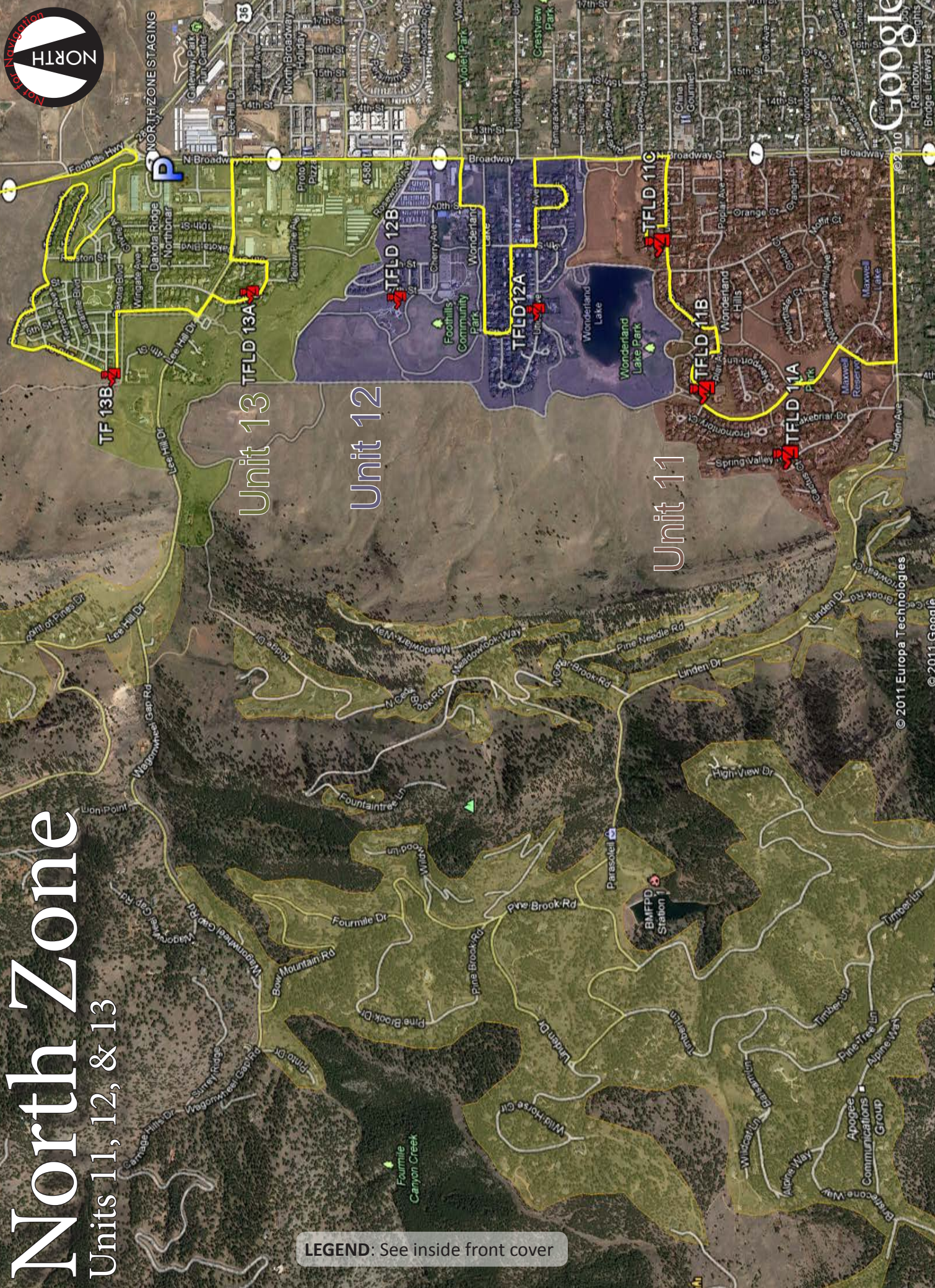




NORTHERN ZONE

North Zone

Units 11, 12, & 13



LEGEND: See inside front cover



North Zone Resources

Unit 11 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 17 ENGINES TYPE 1-3
- 3 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20-person)

Equipment

- 1600' 1.5" HOSE
- 800' 1" HOSE
- 8 1.5" GATED WYES W/ 1" REDUCERS
- 8 1" NOZZLES

Unit 12 Resources List

Personnel

- 2 TASK FORCE LEADERS
- 9 ENGINES TYPE 1-3
- 5 ENGINE TYPE 3-6
- 1 HAND CREW, Squad (5-person)

Equipment

None

Unit 13 Resources List

Personnel

- 2 TASK FORCE LEADERS
- 7 ENGINES TYPE 1-3
- 3 ENGINES TYPE 3-6
- 1 HAND CREW, TYPE 2 IA or better

Equipment

None



Unit 13

Plan View



LEGEND: See inside front cover

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Unit 13 Description

Planning Unit 13 is located on the far north side of city of Boulder in the North Zone. It is located in the Dakota Ridge area between Fourmile Canyon creek to the south and the open space to the north of the city. Planning Unit 13 is composed of the North Boulder and Dakota Ridge subdivisions. It contains approximately 1.0 miles of urban interface edge.

Boundary

Fourmile Canyon Creek to Broadway

Threatened Structures

Commercial: 0

Residential: 27

Multifamily: 0

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca. Scattered Fuel Model 2 (ponderosa pine with grass and needle-cast understory).

Community Layout

Densely-packed, single family structures with interspersed open space. Pockets of wildland and ornamental fuels between streets with fair to good access behind structures.

Construction

Typical wood-framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

North Zone staging located at Broadway & Front Range Avenue

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons. Volunteer evacuations located in yellow polygon.

Defensible Space

Excellent along OSMP/private boundaries. Private residences contain ornamental vegetation and some combustible fences making access from front of structures difficult at times. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Access

Open space land is accessible by 4x4 vehicles in most areas. Construction of line not needed for complete coverage. Plumbing of line locations will not be

Unit 13

Bird's Eye View



LEGEND: See inside front cover

needed in most areas. Spotting may create the need for secondary lines due to interspersed fuels between homes.

Fire Probability

Very High along entire planning unit.

Probability of Success

Very good based on access and presence of existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' out on either side.

Aircraft

Aircraft may be needed to suppress fire. Aircraft not anticipated to be needed for structure protection. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics

2 TASK FORCE LEADERS

7 ENGINES TYPE 1-3

3 ENGINES TYPE 3-6

1 HAND CREW, TYPE 2 IA or better



ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	13B
1. Incident Name: PREPLAN			2. Operational Period (Date / Time)			
			From:	To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 13 BRAVO			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
ENG TYP 1-3			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
ENG TYP 1-3			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
ENG TYP 3-6			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
ENG TYP 3-6			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
ENG TYP 3-6			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
HANDCREW, SQUAD			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
HANDCREW, SQUAD			5TH ST AND DAKOTA AVE	<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
1. HOLD 2ND ST, GRANITE AVE, TERRACE CIR, AND FOOTHILLS HWY 2. CONSTRUCT LEE HILL LINE 2. PROTECT STRUCTURES ALONG 2ND ST, GRANITE AVE, TERRACE CIR, AND FOOTHILLS HWY						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed

LEGEND: See inside front cover



Site of future development



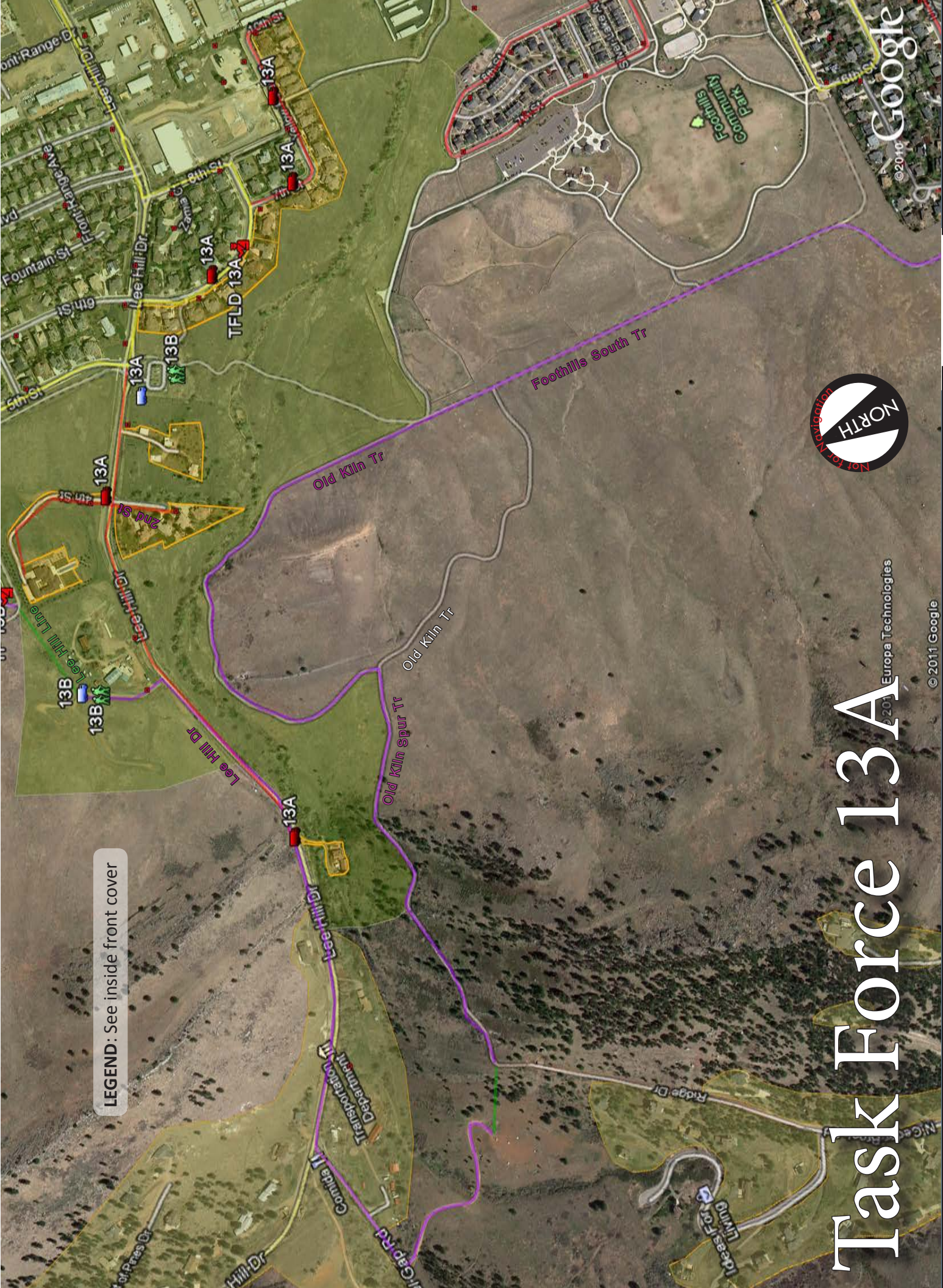
Task Force 13B

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ASSIGNMENT LIST ICS-204		PAGE 1 OF 1	PLANNING UNIT 13A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:	
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP	
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:		NAME	Contact #(s)
		Critical wildland resources	
6. Resources Assigned This Period: "X" indicates 204a attachment with special instructions			
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks
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ENG TYP 1-3			6TH ST AND ZAMIA AVE <input type="checkbox"/>
ENG TYP 1-3			6TH ST AND ZAMIA AVE <input type="checkbox"/>
ENG TYP 1-3			6TH ST AND ZAMIA AVE <input type="checkbox"/>
ENG TYP 1-3			6TH ST AND ZAMIA AVE <input type="checkbox"/>
ENG TYP 1-3			6TH ST AND ZAMIA AVE <input type="checkbox"/>
ENG TYP 3-6			6TH ST AND ZAMIA AVE <input type="checkbox"/>
HANCREW, SQUAD			6TH ST AND ZAMIA AVE <input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
7. ASSIGNMENTS			
1. HOLD WONDERLAND LAKE TRAIL , OLDKILN TRAIL, OLD KILN SPUR 2. PROTECT STRUCTURES ALONG 6TH ST, 7TH ST, 10TH ST, ZAMIA AVE, LEE HILL DR			
8. Special instructions			
1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.			
9. Communications (radio and/or phone contact numbers needed for this assignment)			
Name / Function	Radio: Freq. / System / Channel	Phone	
Command			
Tactical			
Air to Ground			
Emergency Commo			
Medical			
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011	

TBC To be constructed



LEGEND: See inside front cover

Task Force 13A



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Unit 12

Plan View



Foothills South Tr

Wonderland Lake Tr

TFLD-12B

TFLD12A

Shining Mountain
Waldorf School

Foothills
Community
Park

Wonderland
Lake

Wonderland
Lake Park

Broadway

Wonderland Lake

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

9th St

LEGEND: See inside front cover

Unit 12 Description

Planning Unit 12 is located on the northwest side of city of Boulder in the North Zone. It is located north of Wonderland Lake from Sumac Ave in the south to Fourmile Canyon creek in the north. Planning Unit 12 is composed of the Sheets subdivision. It contains approximately .8 miles of urban interface edge.

Boundary

Sumac Avenue to Fourmile Canyon Creek

Threatened Structures

Commercial: 0

Residential: 57

Multifamily: 0

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca. Scattered Fuel Model 2 (ponderosa pine with grass and needle-cast understory).

Community Layout

Densely-packed, single family structures with interspersed open space. Pockets of wildland and ornamental fuels between streets with fair to good access behind structures.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

North Zone staging located at Broadway & Front Range Avenue

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons. Volunteer evacuations located in blue polygon.

Defensible Space

Excellent along OSMP/private boundaries. Private residences contain ornamental vegetation and some combustible fences making access from front of structures at times difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder

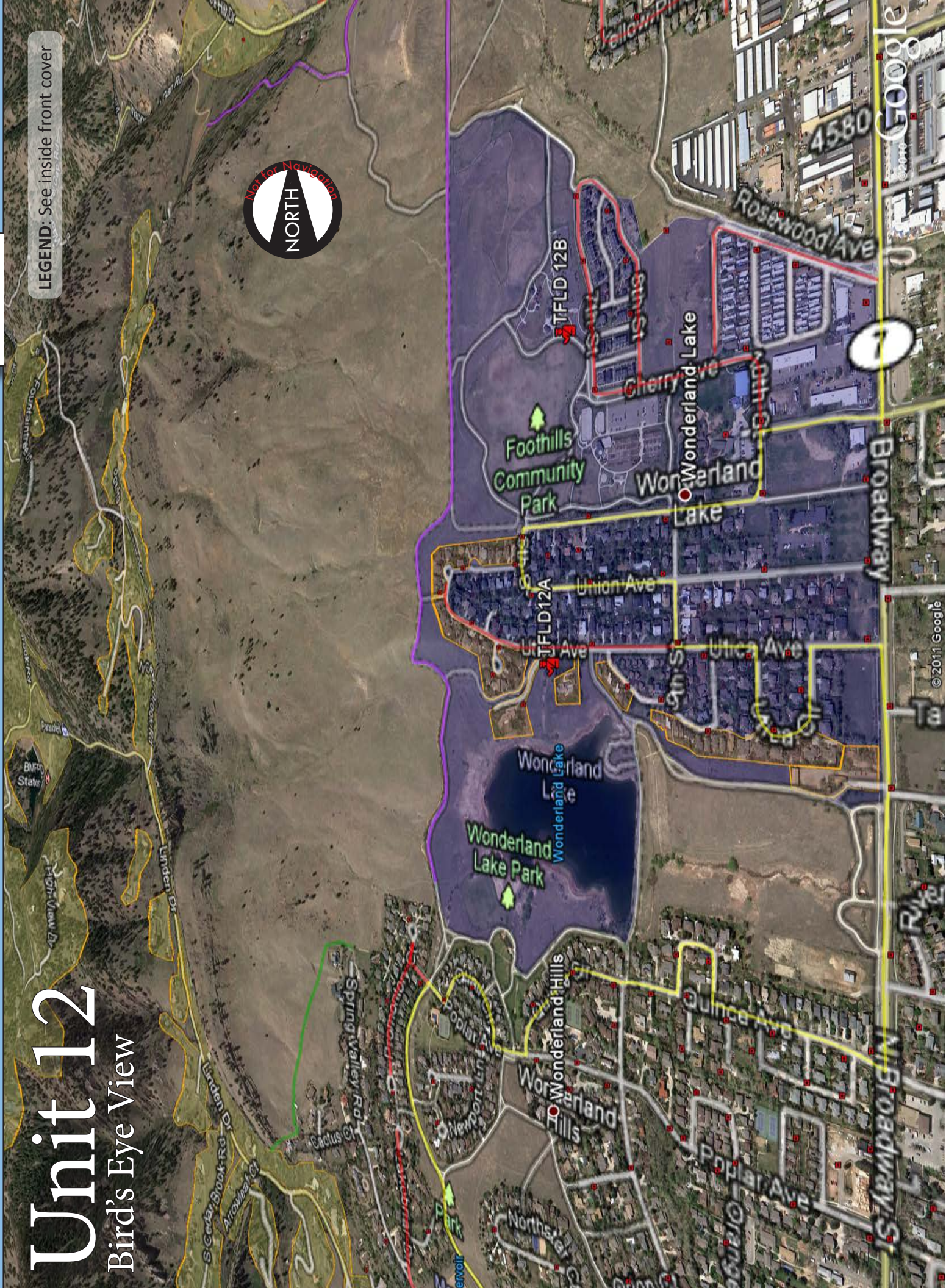
Access

Open space land is accessible by 4x4 vehicles in most areas. Construction of line not needed for complete coverage. Plumbing of line locations will not be

Unit 12

Bird's Eye View

LEGEND: See inside front cover



needed. Spotting may create the need for secondary lines due to interspersed fuels between homes.

Fire Probability

Very High along entire planning unit.

Probability of Success

Very good based on access and presence of existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' out on either side.

Aircraft

Aircraft may be needed to suppress fire. Aircraft not anticipated to be needed for structure protection. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics

2 TASK FORCE LEADERS

9 ENGINES TYPE 1-3

5 ENGINES TYPE 3-6

1 HAND CREW, Squad (5-person)



ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	12B
1. Incident Name: PREPLAN			2. Operational Period (Date / Time)			
			From:	To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 12 BRAVO			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
ENG TYP 1-3			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
ENG TYP 1-3			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
ENG TYP 1-3			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
ENG TYP 3-6			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
ENG TYP 3-7			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
ENG TYP 3-8			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
HANCREW, SQUAD			7TH ST AND CHERRY AVE	<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
1. HOLD WONDERLAND LAKE TRAIL						
2. PROTECT STRUCTURES ALONG 7TH ST, 8TH ST, 10TH ST, CHERRY ST, LOCUST AVE						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed

Task Force 12B

LEGEND: See inside front cover

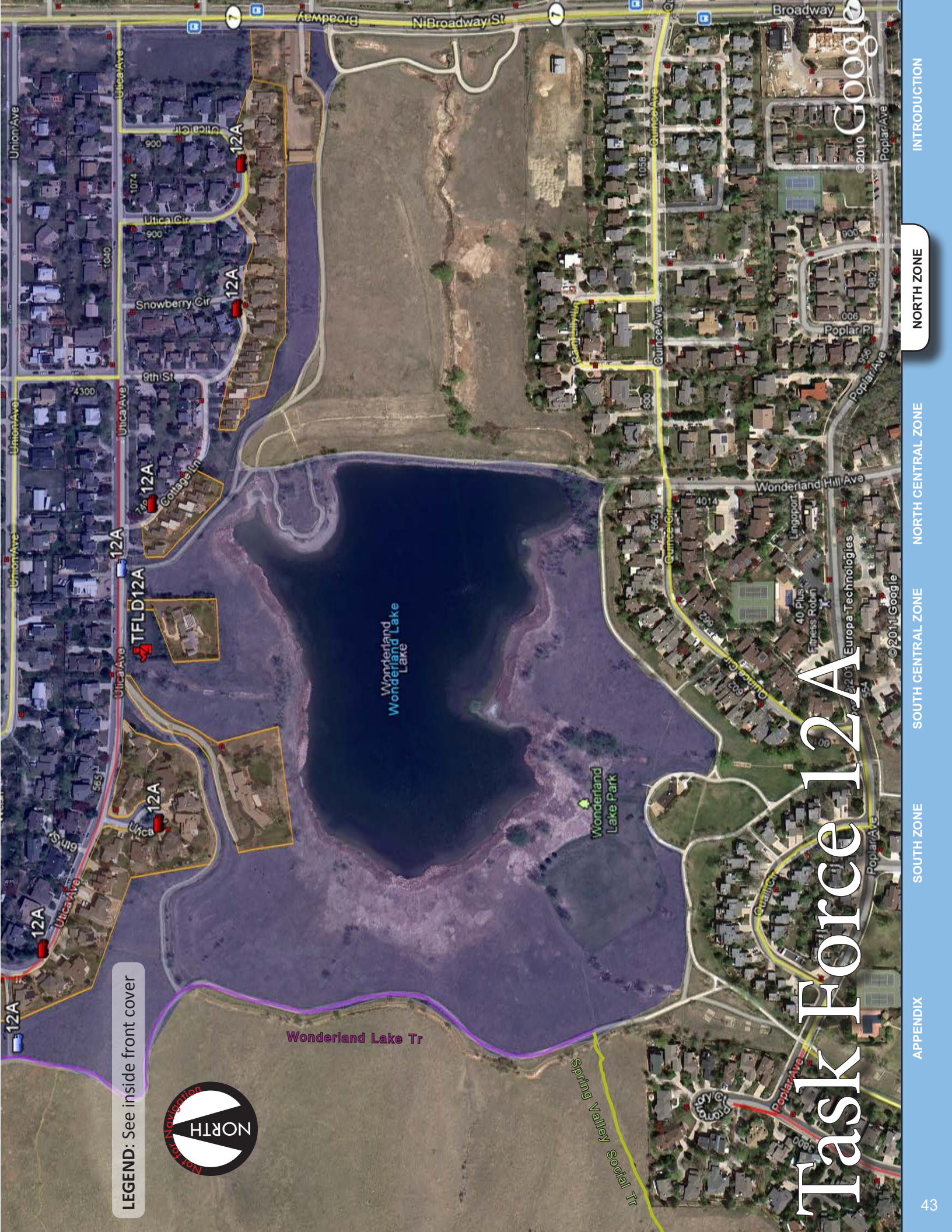


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ASSIGNMENT LIST ICS-204		PAGE	1 OF	PLANNING UNIT	12A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)			
		From:	To:		
3. Branch		4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER					
5. Operations Personnel		NAME	Contact #(s)		
Operations Section Chief:				Critical wildland resources	
Branch Director:					
Division/Group Supervisor:					
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions	
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓	
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ENG TYP 1-3			UTICA AVE	<input type="checkbox"/>	
ENG TYP 1-3			UTICA AVE	<input type="checkbox"/>	
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ENG TYP 3-6			UTICA AVE	<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
7. ASSIGNMENTS					
1. PROTECT STRUCTURES ALONG UTICA AVE, UTICA CIR, SNOWBERRY CIR,					
8. Special instructions					
1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.					
9. Communications (radio and/or phone contact numbers needed for this assignment)					
Name / Function	Radio: Freq. / System / Channel	Phone			
Command					
Tactical					
Air to Ground					
Emergency Commo					
Medical					
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011		

TBC To be constructed



LEGEND: See inside front cover



Wonderland Lake Tr

Spring Valley Social Tr

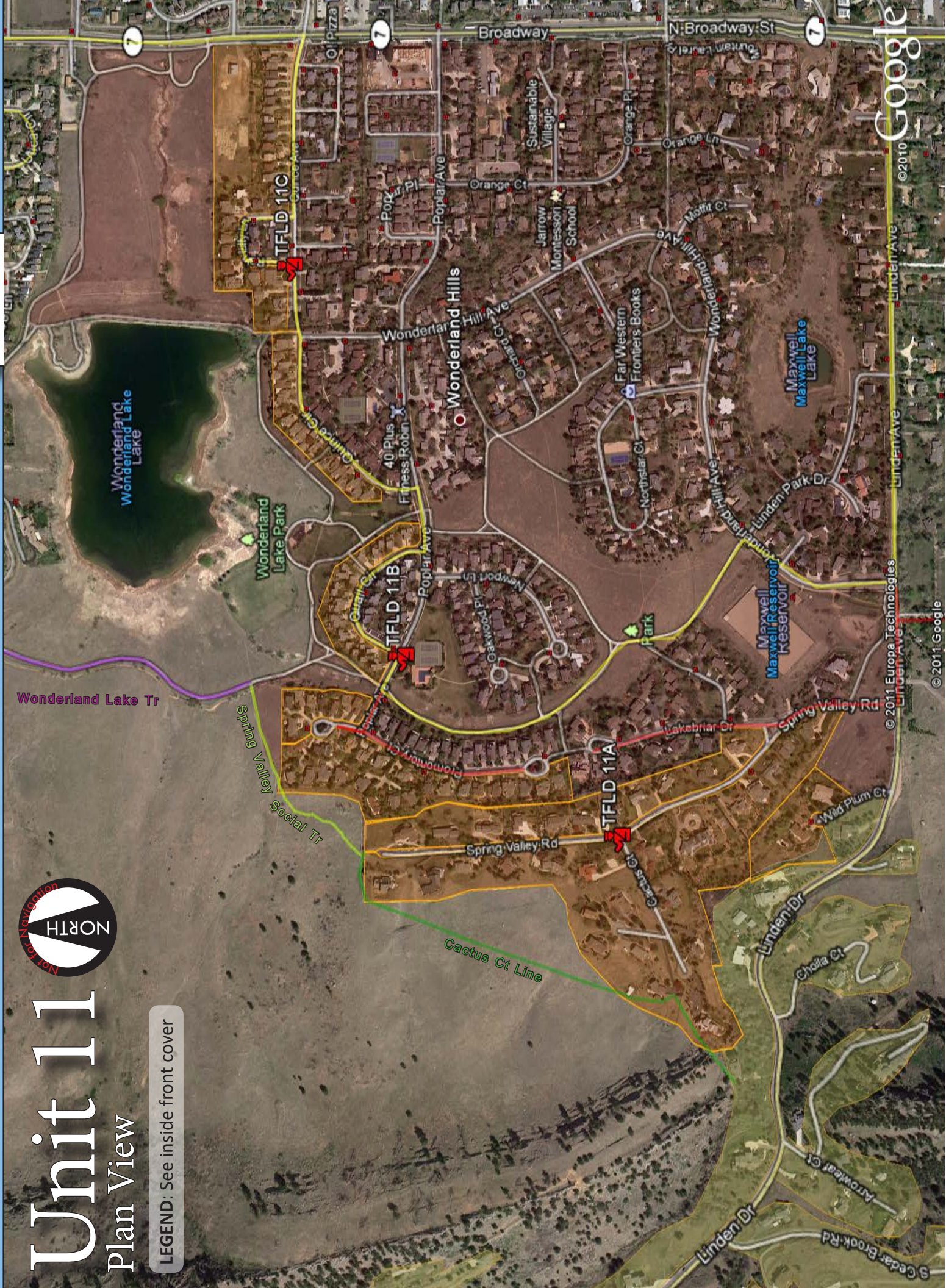
Task Force 12A

Unit 11

Plan View



LEGEND: See inside front cover



Unit 11 Description

Planning Unit 11 is located on the west side of city of Boulder in the North Zone. It is located south of Wonderland Lake from Linden Avenue in the south to Wonderland Lake to the north. Planning Unit 11 is composed of the Wonderland Lake subdivision. It contains approximately 1.25 miles of urban interface edge.

Boundary

Linden Avenue to Sumac Avenue

Threatened Structures

Commercial: 0

Residential: 170

Multifamily: 0

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca. Scattered Fuel Model 2 (ponderosa pine with grass and needle-cast understory).

Community Layout

Densely-packed, single family structures with interspersed open space. Pockets of wildland and ornamental fuels between streets with fair to good access behind structures.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

North Zone staging located at Broadway & Front Range Avenue

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons. Volunteer evacuations located in red polygon.

Defensible Space

Excellent along OSMP/private boundaries. Private residences contain ornamental vegetation and some combustible fences making access from front of structures difficult at times. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Access:

Open space land not accessible to 4x4 vehicles in most areas. Minor construction of line will be needed for complete coverage. Plumbing of

Unit 11

Bird's Eye View

LEGEND: See inside front cover



line locations will be mandatory in most line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to interspersed fuels between homes.

Fire Probability

Very High along entire planning unit.

Probability of Success

Fair based on access and presence of some existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations. Remove heavy concentrations of brush within 100' of homes and primary lines.

Aircraft

Use of heavy concentrations of retardant (5,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$50,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

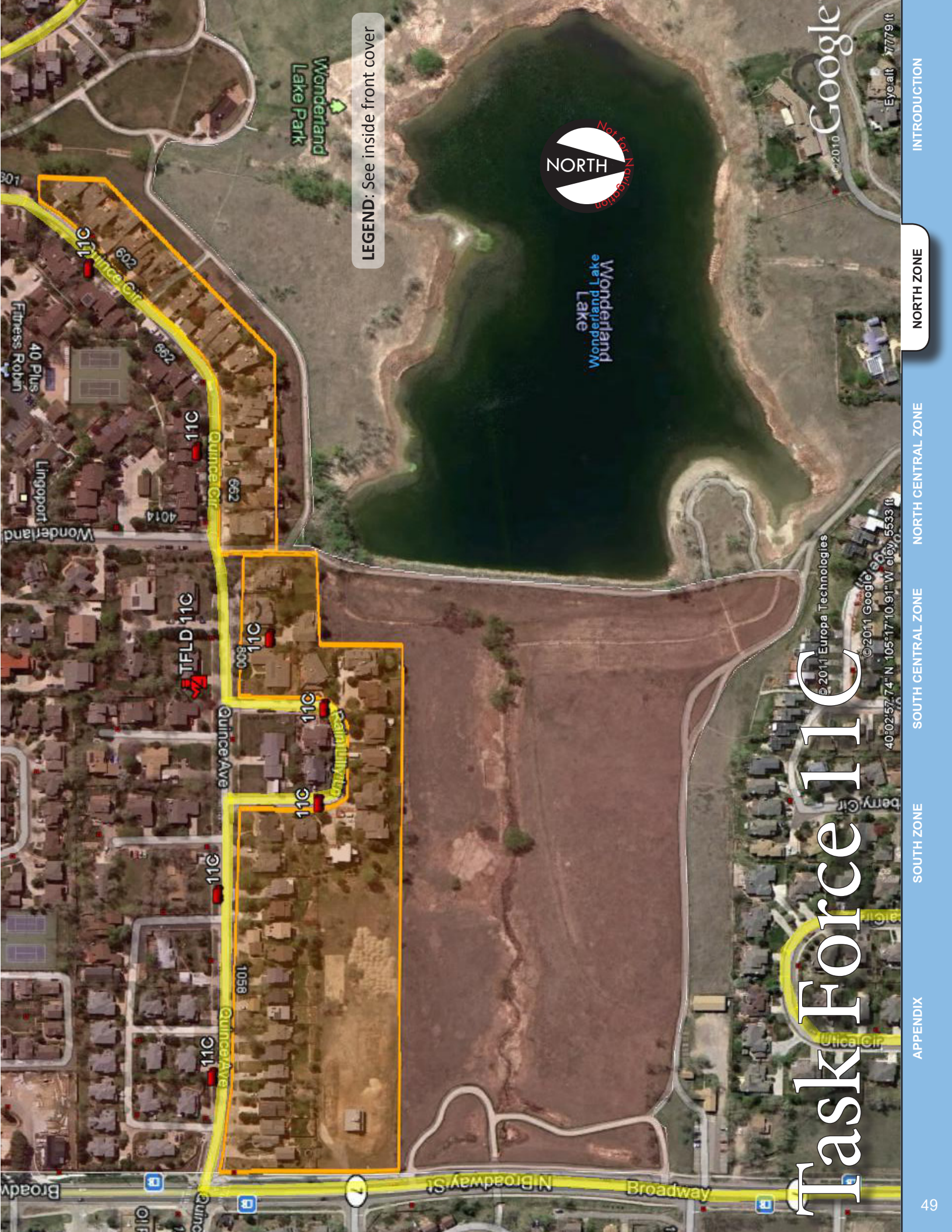
The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics

3 TASK FORCE LEADERS
17 ENGINES TYPE 1-3
3 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW (20-person)

1600' 1.5" HOSE
800' 1" HOSE
8 1.5" GATED WYES W/ 1" REDUCERS
8 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE 1 OF 1	PLANNING UNIT 11C
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:		
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP		
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:	NAME	Contact #(s)	Critical wildland resources	
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓
TFLD 11 CHARLIE			QUINCE AVE	<input type="checkbox"/>
ENG TYP 1-3			QUINCE AVE	<input type="checkbox"/>
ENG TYP 1-3			QUINCE AVE	<input type="checkbox"/>
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ENG TYP 1-3			QUINCE AVE	<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
7. ASSIGNMENTS				
1. PROTECT STRUCTURES ALONG QUINCE AVE				
8. Special instructions				
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.				
9. Communications (radio and/or phone contact numbers needed for this assignment)				
Name / Function	Radio: Freq. / System / Channel	Phone		
Command				
Tactical				
Air to Ground				
Emergency Commo				
Medical				
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time		
Assignment List		ICS 204 -BFD REVISED June 2011		



LEGEND: See inside front cover



Task Force 11C

ASSIGNMENT LIST ICS-204		PAGE 1 OF 1	PLANNING UNIT 11B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: _____ To: _____	
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP	
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:	NAME	Contact #(s)	Critical wildland resources
6. Resources Assigned This Period:			"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks
TFLD 11 BRAVO			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 1-3			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 1-3			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 1-3			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 1-3			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 1-3			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 3-6			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
ENG TYP 3-6			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
HANDCREW, SQUAD			POPLAR AVE AND QUAIL CR <input type="checkbox"/>
			<input type="checkbox"/>
7. ASSIGNMENTS			
1. IMPROVE SPRING VALLEY SOCIAL TRAIL. PLUMB AS NEEDED. 2. PROTECT STRUCTURES ALONG PROMONTORY CT, QUAIL CIR, AND QUINCE			
8. Special instructions			
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. SPRING VALLEY SOCIAL TRAIL HOSE LAY WILL REQUIRE 1200' 1.5" HOSE, 600' 1" HOSE, 6 GATED WYES W/ 1.5 TO 1" REDUCERS, AND 6 1" NOZZLES.			
9. Communications (radio and/or phone contact numbers needed for this assignment)			
Name / Function	Radio: Freq. / System / Channel	Phone	
Command			
Tactical			
Air to Ground			
Emergency Commo			
Medical			
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011	

LEGEND: See inside front cover



Task Force 11B

ASSIGNMENT LIST ICS-204			PAGE 1 OF 1	PLANNING UNIT 11A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: _____ To: _____		
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP		
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:	NAME	Contact #(s)	Critical wildland resources	
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓
TFLD 11 ALPHA			CACTUS CT	<input type="checkbox"/>
ENG TYP 1-3			CACTUS CT	<input type="checkbox"/>
ENG TYP 1-3			CACTUS CT	<input type="checkbox"/>
ENG TYP 1-3			CACTUS CT	<input type="checkbox"/>
ENG TYP 1-3			CACTUS CT	<input type="checkbox"/>
ENG TYP 1-3			CACTUS CT	<input type="checkbox"/>
ENG TYP 1-3			CACTUS CT	<input type="checkbox"/>
HANDCREW, SQUAD			CACTUS CT	<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
7. ASSIGNMENTS				
1. CONSTRUCT CACTUS CT LINE FROM 615 LINDEN AVE TO END OFSPRING VALLEY RD. PLUMB AS NEEDED. 2. PROTECT STRUCTURES ALONG WILD PLUM, SPRINGVALLEY RD, CACTUS CT				
8. Special instructions				
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. CACTUS LINE HOSE LAY WILL REQUIRE 1600' 1.5" HOSE, 800' 1" HOSE, 8 GATED WYES W/ 1.5 TO 1" REDUCERS, AND 8 1" NOZZLES.				
9. Communications (radio and/or phone contact numbers needed for this assignment)				
Name / Function	Radio: Freq. / System / Channel	Phone		
Command				
Tactical				
Air to Ground				
Emergency Commo				
Medical				
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time		
Assignment List		ICS 204 -BFD REVISED June 2011		



LEGEND: See inside front cover

Task Force 11A

Linden Avenue to Canyon Boulevard

Units

8

9

10





NORTH-CENTRAL ZONE

North Central Zone

Units 8, 9, & 10

LEGEND: See inside front cover

Unit 10

Unit 9

Unit 8

TFLD 10B

TFLD 10A

TFLD 9B

TFLD 9A

TF 8C

TF 8B

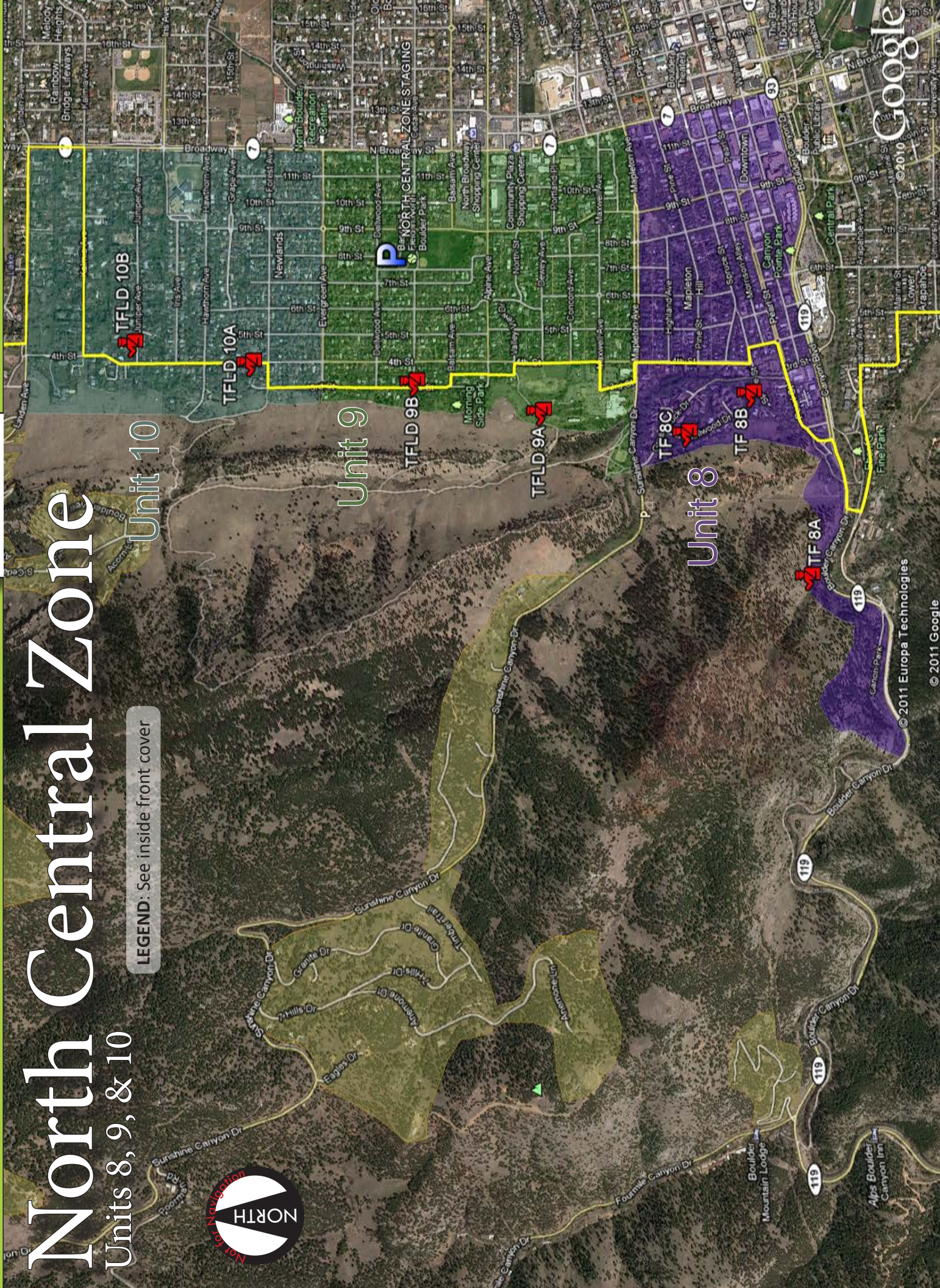
TF 8A

NORTH CENTRAL ZONE STAGING



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Google



North Central Zone Resources

Unit 8 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 10 ENGINES TYPE 1-3
- 5 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20 person)

Equipment

- 2000' 1.5" HOSE
- 1000' 1" HOSE
- 10 1.5" GATED WYES W/ 1" REDUCERS
- 10 1" NOZZLES

Unit 9 Resources List

Personnel

- 2 TASK FORCE LEADERS
- 10 ENGINES TYPE 1-3
- 2 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20 person)

Equipment

- 5000' 1.5" HOSE
- 2500' 1" HOSE
- 25 1.5" GATED WYES W/ 1" REDUCERS
- 25 1" NOZZLES

Unit 10 Resources List

Personnel

- 2 TASK FORCE LEADERS
- 10 ENGINES TYPE 1-3
- 3 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20 person)

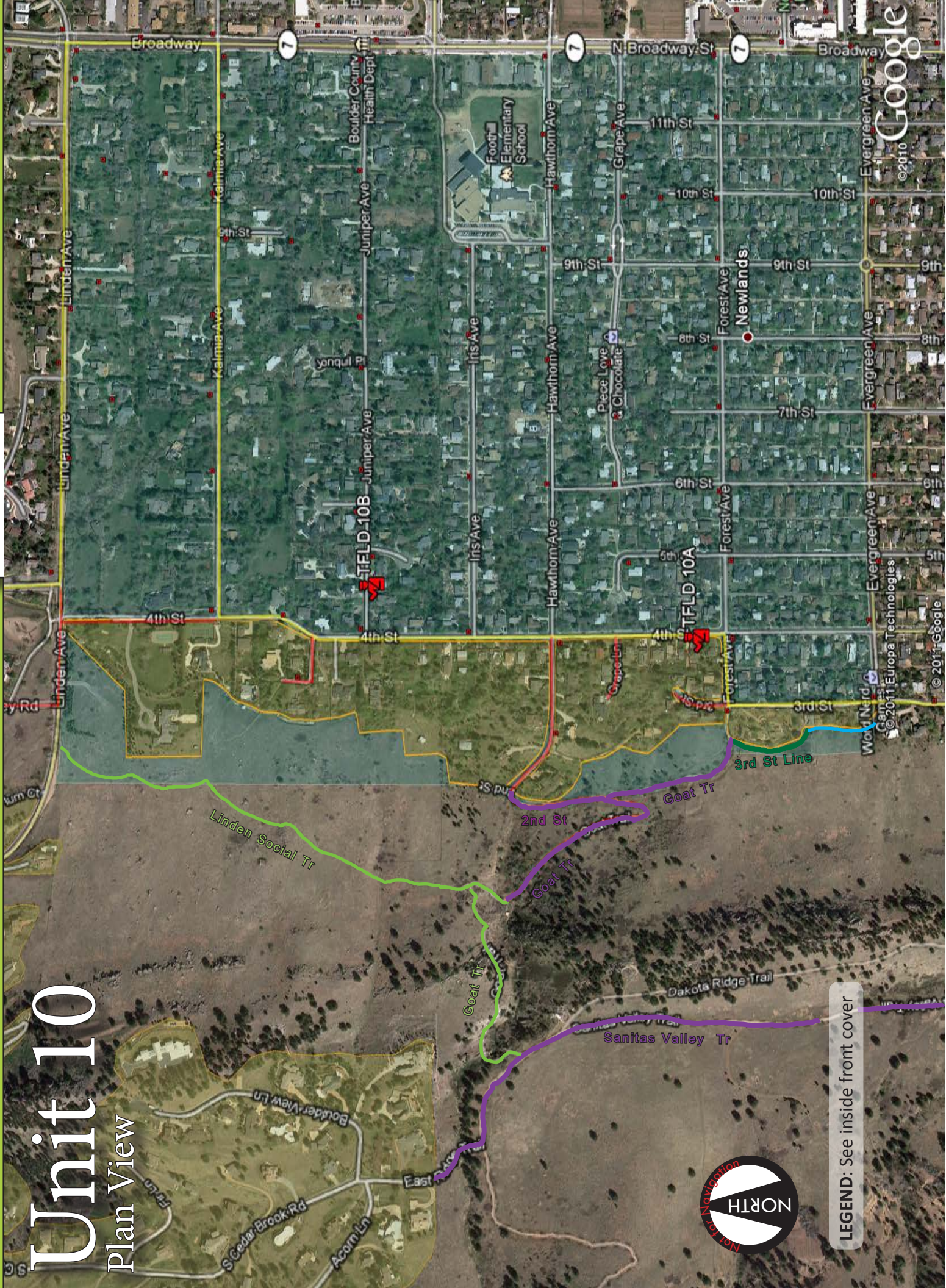
Equipment

- 2000' 1.5" HOSE
- 1000' 1" HOSE
- 10 1.5" GATED WYES W/ 1" REDUCERS
- 10 1" NOZZLES



Unit 10

Plan View



LEGEND: See inside front cover

Unit 10 Descriptions

Planning Unit 10 is located on the west side of city of Boulder in the North Central Zone. It is located east of the Mt. Sanitas area between Evergreen Avenue to the south and Two Mile Canyon (Linden) to the North. Planning Unit 10 is composed of the Newlands and Juniper subdivision. It contains approximately .7 miles of urban interface edge.

Boundary

Evergreen Avenue to Linden Avenue

Threatened Structures

Commercial: 0

Residential: 73

Multifamily: 0

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca. Scattered Fuel Model 2 (ponderosa pine with grass and needle-cast understory).

Community Layout

Densely-packed, single family structures with interspersed open space. Large pockets of wildland and ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

North Central Zone staging located at 9th & Dellwood

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in blue polygon.

Defensible Space

Excellent along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Access

Open space land not accessible to 4x4 vehicles in most areas. Minor

Unit 10

Bird's Eye View

LEGEND: See inside front cover



construction of line will be needed for complete coverage. Plumbing of line locations will be mandatory in most line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to interspersed fuels between homes and complicated existing defensible features.

Fire Probability

High along entire planning unit.

Probability of Success

Fair based on access, presence of some existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations. Remove heavy concentrations of brush within 100' of homes and primary lines.

Aircraft

Use of heavy concentrations of retardant (5,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$50,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

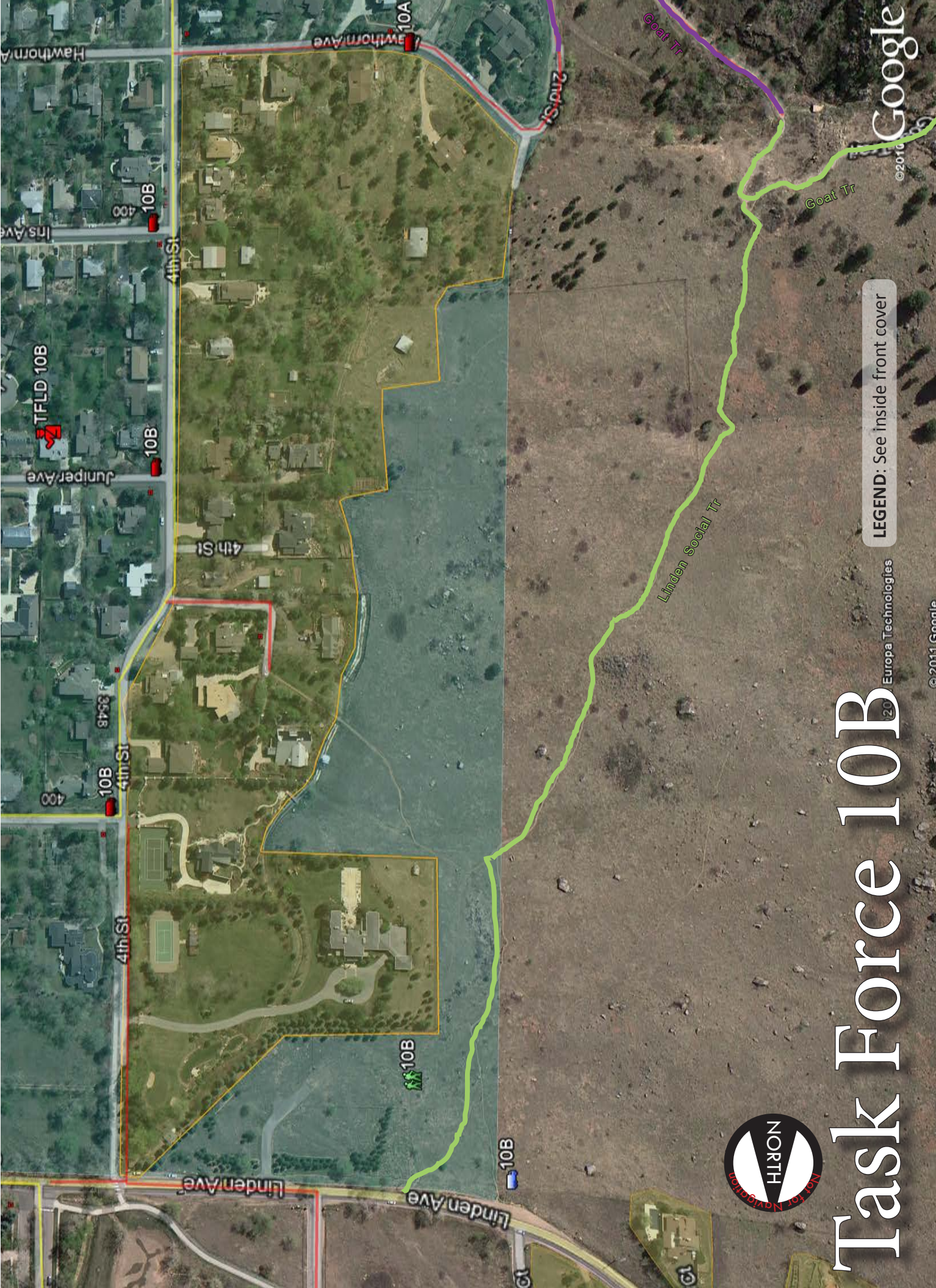
The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics

2 TASK FORCE LEADERS
10 ENGINES TYPE 1-3
3 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW (20-person)

2000' 1.5" HOSE
1000' 1" HOSE
10 1.5" GATED WYES W/ 1" REDUCERS
10 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE 1 OF	PLANNING UNIT 10B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:		
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP		
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:		NAME	Contact #(s)	Critical wildland resources
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓
TFLD 10 BRAVO			4TH ST AND KALMIA AVE	<input type="checkbox"/>
ENG TYP 1-3			4TH ST AND KALMIA AVE	<input type="checkbox"/>
ENG TYP 1-3			4TH ST AND KALMIA AVE	<input type="checkbox"/>
ENG TYP 1-3			4TH ST AND KALMIA AVE	<input type="checkbox"/>
ENG TYP 3-6			4TH ST AND KALMIA AVE	<input type="checkbox"/>
ENG TYP 3-6			4TH ST AND KALMIA AVE	<input type="checkbox"/>
HANDCREW, SQUAD 10			4TH ST AND KALMIA AVE	<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
7. ASSIGNMENTS				
1. IMPROVE LINDEN SOCIAL TRAIL TO PLUMB AS NEEDED 2. PROTECT STRUCTURES ALONG HAWTHORN AVE, 4TH ST				
8. Special instructions				
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. LINDEN SOCIAL TRAIL HOSE LAY WILL REQUIRE 2500' 1.5" HOSE, 1300' 1" HOSE, 13 GATED WYES W/ 1.5 TO 1" REDUCERS, AND 13 1" NOZZLES.				
9. Communications (radio and/or phone contact numbers needed for this assignment)				
Name / Function	Radio: Freq. / System / Channel	Phone		
Command				
Tactical				
Air to Ground				
Emergency Commo				
Medical				
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief)		Date / Time
Assignment List		ICS 204 -BFD REVISED June 2011		



LEGEND: See inside front cover

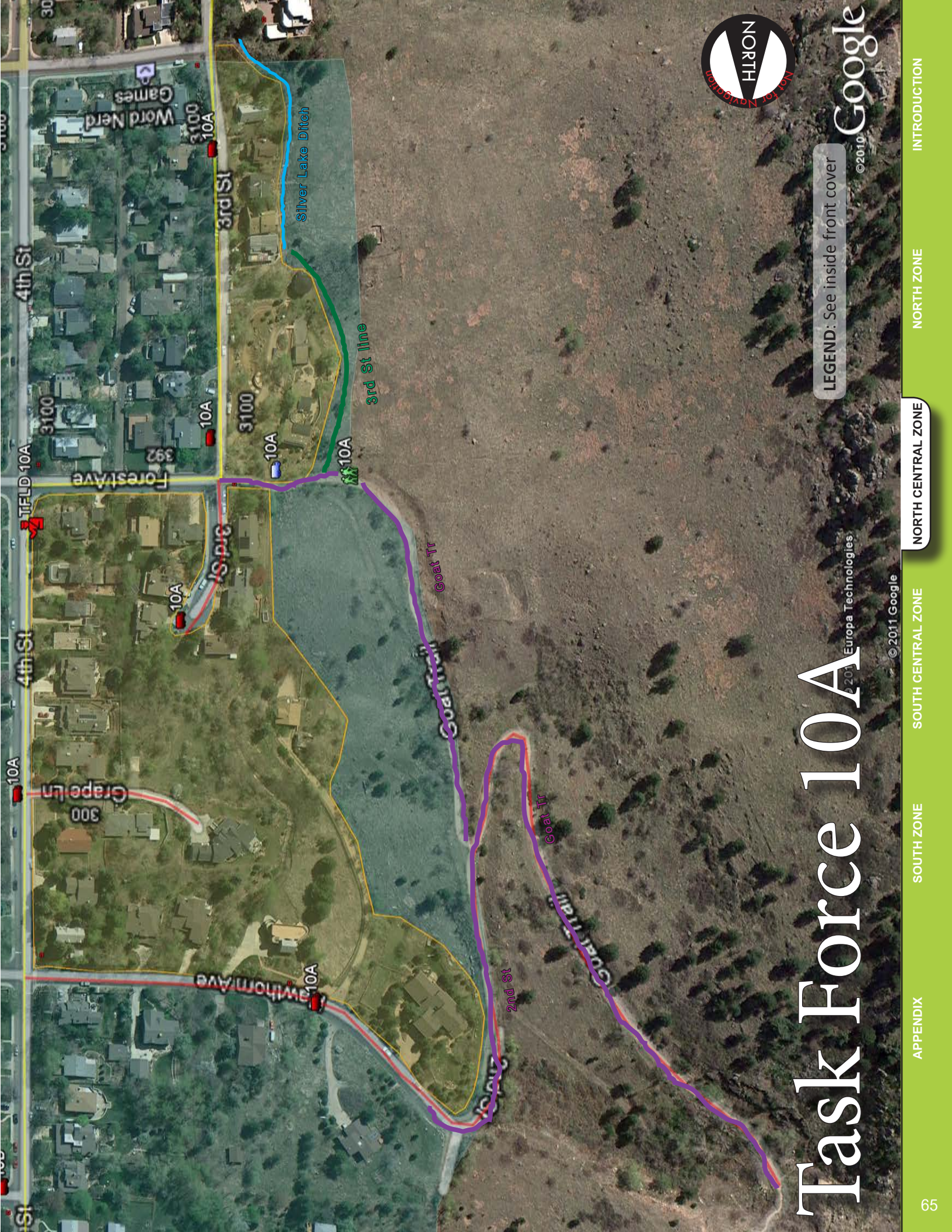
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Task Force 10B

ASSIGNMENT LIST ICS-204		PAGE	1 OF	PLANNING UNIT	10A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)			
		From:	To:		
3. Branch		4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER					
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources	
Operations Section Chief:					
Branch Director:					
Division/Group Supervisor:					
6. Resources Assigned This Period:		"X" indicates 204a attachment with special instructions			
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓	
TFLD 10 ALPHA			4TH ST AND FOREST AVE	<input type="checkbox"/>	
ENG TYP 1-3			4TH ST AND FOREST AVE	<input type="checkbox"/>	
ENG TYP 1-3			4TH ST AND FOREST AVE	<input type="checkbox"/>	
ENG TYP 1-3			4TH ST AND FOREST AVE	<input type="checkbox"/>	
ENG TYP 1-3			4TH ST AND FOREST AVE	<input type="checkbox"/>	
ENG TYP 1-3			4TH ST AND FOREST AVE	<input type="checkbox"/>	
ENG TYP 3-6			4TH ST AND FOREST AVE	<input type="checkbox"/>	
HANDCREW,SQUAD 10			4TH ST AND FOREST AVE	<input type="checkbox"/>	
				<input type="checkbox"/>	
				<input type="checkbox"/>	
7. ASSIGNMENTS					
1. HOLD 2ND ST TRAIL, GRAPE AVE TRAIL, AND IMPROVE GOAT TRAIL TO SANITAS TRAIL 2. PROTECT STRUCTURES ALONG HAWTHORN AVE, GRAPE LN, 4TH ST, AND FOREST AVE					
8. Special instructions					
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. GOAT TRAIL HOSE LAY WILL REQUIRE 600' 1.5" HOSE, 300' 1" HOSE, 3 GATED WYES W/ 1.5 TO 1" REDUCERS, AND 3 1" NOZZLES.					
9. Communications (radio and/or phone contact numbers needed for this assignment)					
Name / Function	Radio: Freq. / System / Channel	Phone			
Command					
Tactical					
Air to Ground					
Emergency Commo					
Medical					
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011			



Task Force 10A

LEGEND: See inside front cover



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Unit 9

Plan View

LEGEND: See inside front cover



Unit 9 Description

Planning Unit 9 is located on the west side of the city of Boulder in the North Central Zone. It is located on the east side of the Mt. Sanitas area between Sunshine Canyon to the south and Evergreen Avenue to the north. Planning Unit 9 is composed of the Newlands subdivision. It contains approximately .75 miles of urban interface edge.

Boundary

Sunshine Canyon to Evergreen Ave

Threatened Structures

Commercial: 0

Residential: 36

Multifamily: 0

Target hazards: 1

Critical infrastructure: 1

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca. Scattered Fuel Model 2 (ponderosa pine with grass and needle-cast understory).

Community Layout

Densely-packed, single family structures and one hospital complex with interspersed open space. Large pockets of wildland and ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

North Central Zone staging located at 9th & Dellwood

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in green polygon.

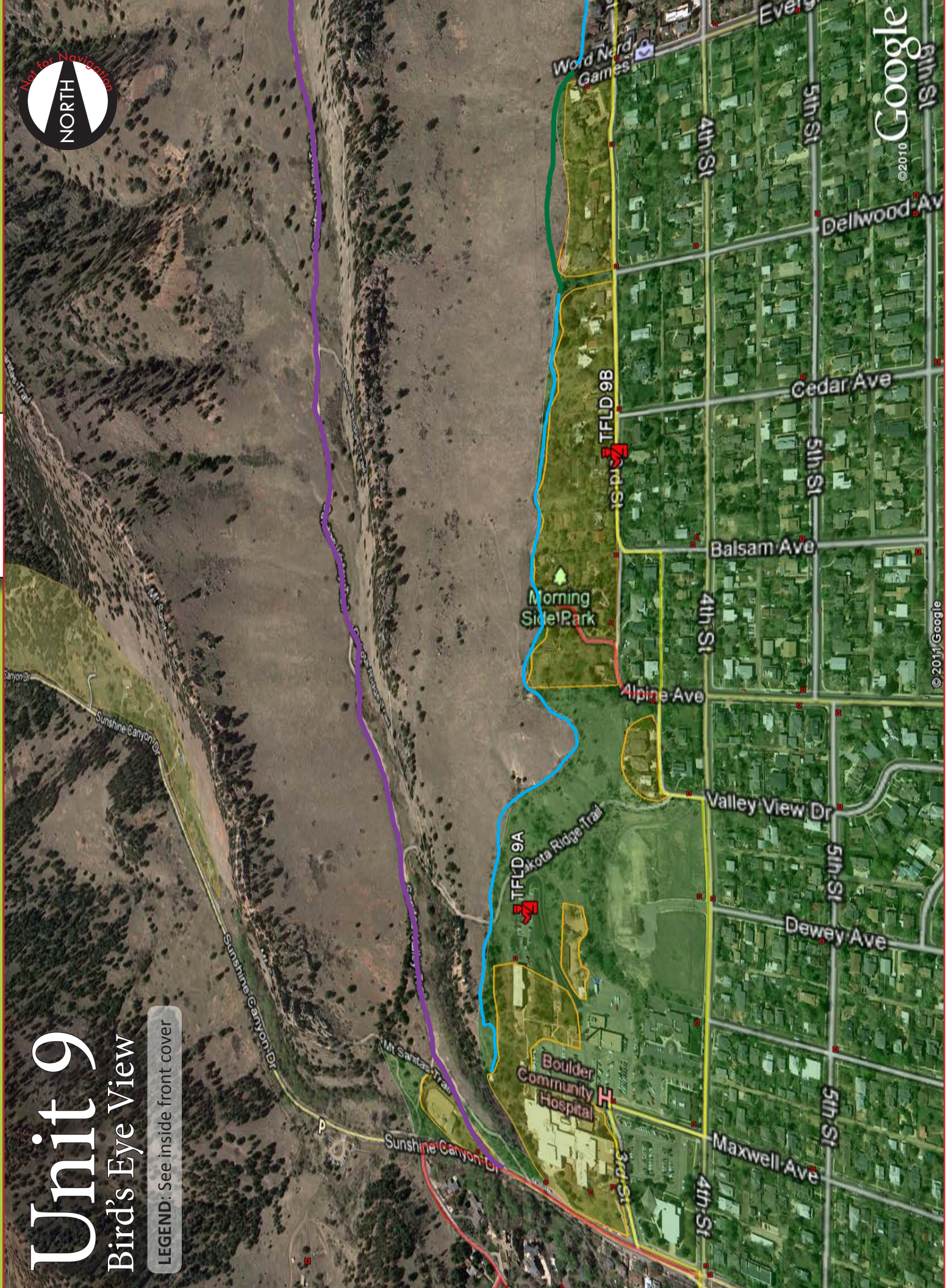
Defensible Space

Excellent along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Unit 9

Bird's Eye View

LEGEND: See inside front cover



Access

Open space land not accessible to 4x4 vehicles in some areas. Major construction of line will be needed for complete coverage. Plumbing of line locations will be mandatory in some line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to interspersed fuels between homes. An alternative line could be made using the irrigation ditch west of 3rd Street.

Fire Probability

High along entire planning unit.

Probability of Success

Good based on access, presence of existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations. Remove heavy concentrations of brush within 100' of homes and primary lines.

Aircraft

Use of heavy concentrations of retardant (10,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$100,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

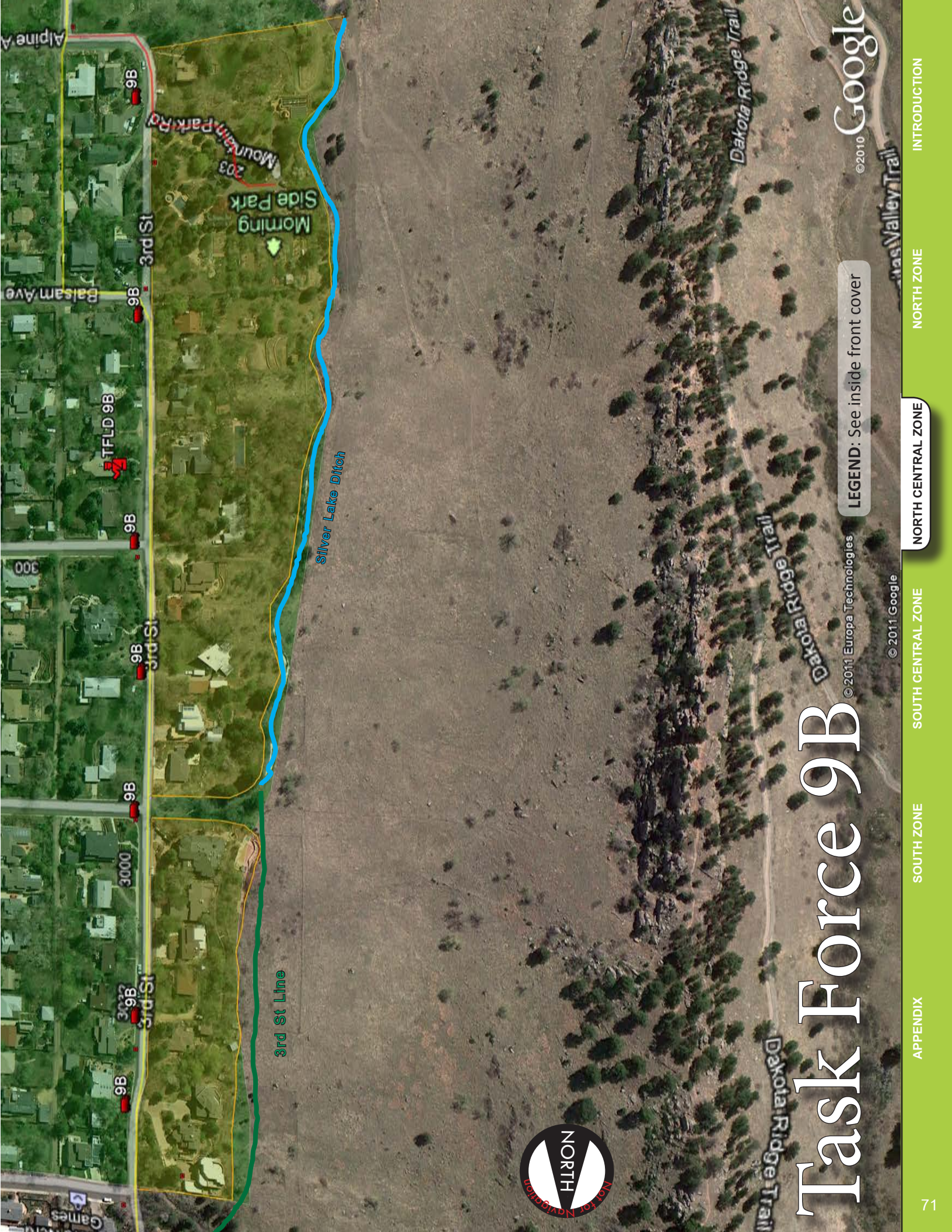
Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Logistics

2 TASK FORCE LEADERS
10 ENGINES TYPE 1-3
2 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW (20-person)

5000' 1.5" HOSE
2500' 1" HOSE
251.5" GATED WYES W/ 1" REDUCERS
25 1" NOZZLES

ASSIGNMENT LIST ICS-204		PAGE 1 OF	PLANNING UNIT 9B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:	
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP	
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:		NAME	Contact #(s)
		Critical wildland resources	
6. Resources Assigned This Period: "X" indicates 204a attachment with special instructions			
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks
TFLD 9 BRAVO			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
ENG TYP 1-3			CEDAR AVE AND 3RD ST <input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
7. ASSIGNMENTS			
1. ASSIT HOLDING MT SANITAS DR TRAIL 2. PROTECT STRUCTURES AT MAPLETON HOSPITAL AND ALONG 3RD ST 3. IRRIGATION DITCH BEHIND STRUCTURES COULD BE IMPROVED AS SECONDARYLINE			
8. Special instructions			
1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.			
9. Communications (radio and/or phone contact numbers needed for this assignment)			
Name / Function	Radio: Freq. / System / Channel	Phone	
Command			
Tactical			
Air to Ground			
Emergency Commo			
Medical			
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011	



Task Force 9B

LEGEND: See inside front cover

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ASSIGNMENT LIST ICS-204		PAGE 1 OF 1	PLANNING UNIT 9A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:	
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP	
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:		NAME	Contact #(s)
		Critical wildland resources	
6. Resources Assigned This Period: *X* indicates 204a attachment with special instructions			
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks
TFLD 9 ALPHA			3RD ST AND MAPLETON <input type="checkbox"/>
ENG TYP 1-3			3RD ST AND MAPLETON <input type="checkbox"/>
ENG TYP 1-3			3RD ST AND MAPLETON <input type="checkbox"/>
ENG TYP 1-3			3RD ST AND MAPLETON <input type="checkbox"/>
ENG TYP 3-6			3RD ST AND MAPLETON <input type="checkbox"/>
ENG TYP 3-6			3RD ST AND MAPLETON <input type="checkbox"/>
HANDCREW, TYP 2 IA OR BETTER			3RD ST AND MAPLETON <input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
7. ASSIGNMENTS			
1. HOLD MT SANITAS DR TRAIL 2. PROTECT STRUCTURES AT MAPLETON HOSPITAL AND ALONG DAKOTA DR 3. IRRIGATION DITCH BEHIND STRUCTURES COULD BE IMPROVED AS SECONDARY LINE			
8. Special instructions			
1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.			
9. Communications (radio and/or phone contact numbers needed for this assignment)			
Name / Function	Radio: Freq. / System / Channel	Phone	
Command			
Tactical			
Air to Ground			
Emergency Commo			
Medical			
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011	



Task Force 9A

LEGEND: See inside front cover



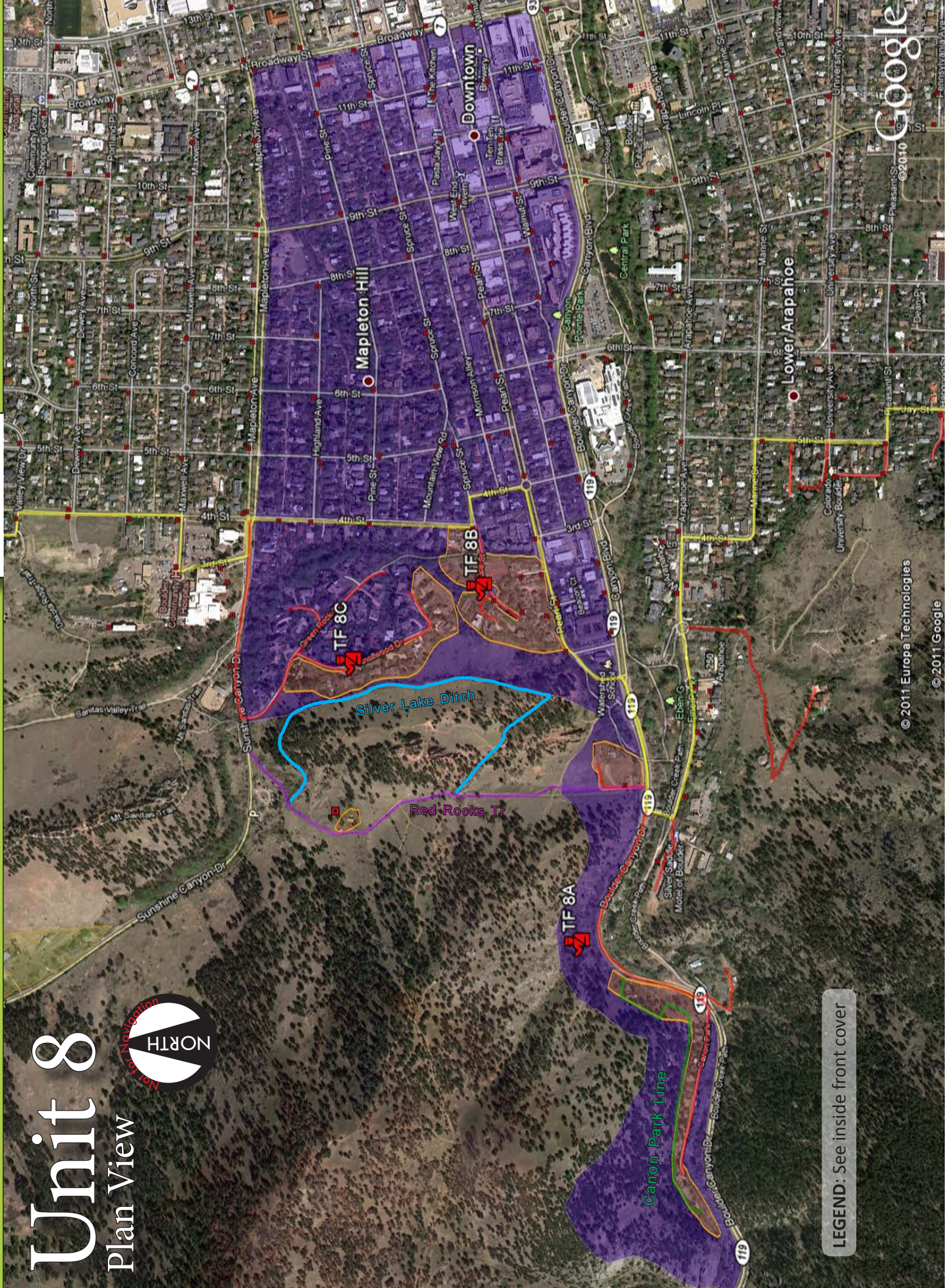
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Unit 8

Plan View



LEGEND: See inside front cover

Unit 8 Descriptions

Planning Unit 8 is located on the west side of city of Boulder in the North Central Zone. It is located in the Centennial Park area from Boulder Canyon in the south to Sunshine Canyon in the north. It contains approximately .5 miles of urban interface edge.

Boundary

Boulder Canyon to Sunshine Canyon

Threatened Structures

Commercial: 0

Residential: 50

Multifamily: 14

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca. Scattered Fuel Model 2 (ponderosa pine with grass and needle-cast understory).

Community Layout

Densely-packed, single family structures and multi-family structures with interspersed open space. Large pockets of wildland and ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

North Central Zone staging located at 9th & Dellwood

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in purple polygon.

Defensible Space

Good along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

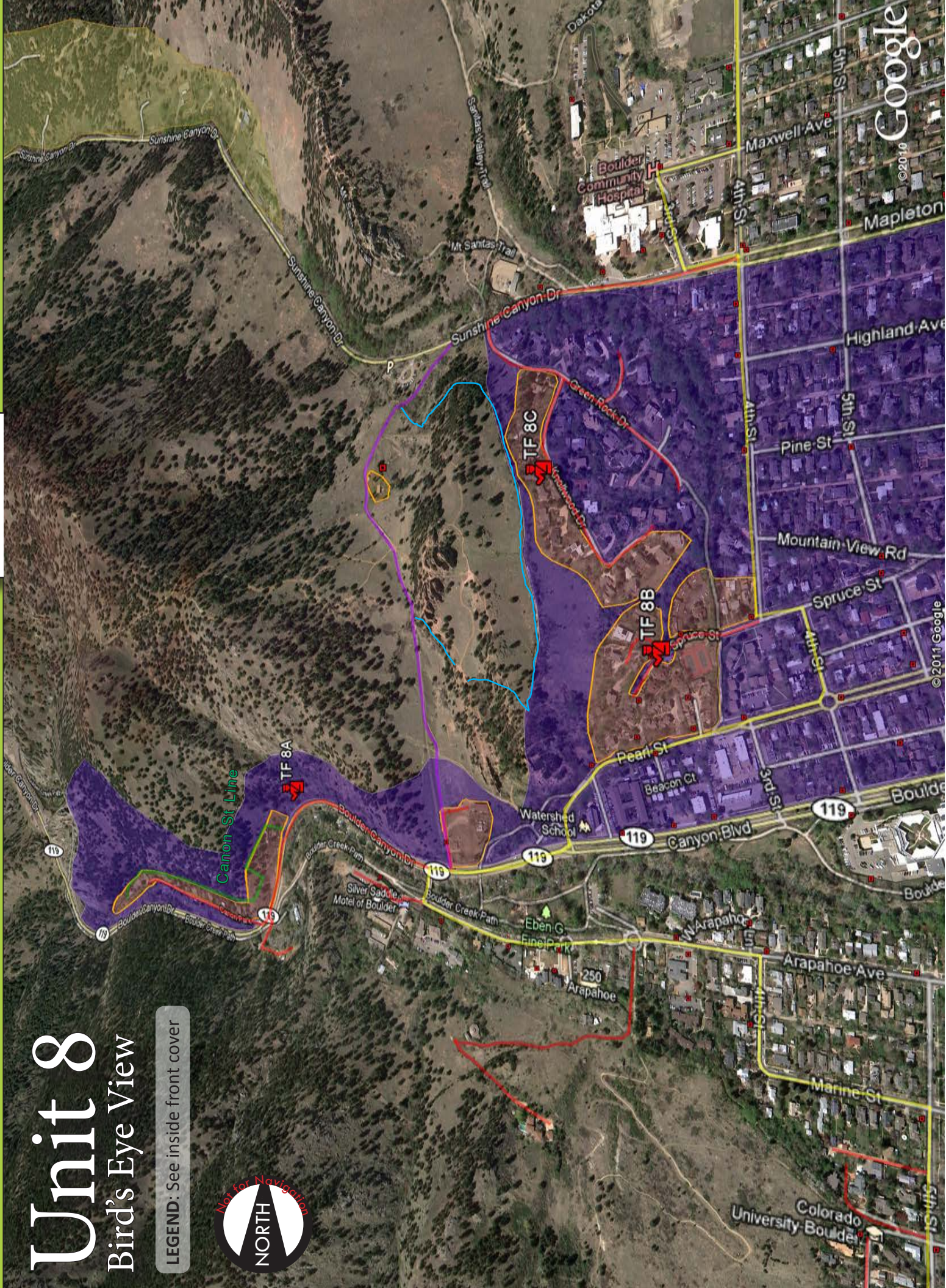
Access

Open space land not accessible to 4x4 vehicles in some areas. Minor construction of line will be needed for complete coverage. Plumbing of

Unit 8

Bird's Eye View

LEGEND: See inside front cover



Google

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line locations will be mandatory in some line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to interspersed fuels between homes and complicated existing defensible features. An alternative line could be made using irrigation ditch west of Knollwood Avenue.

Fire Probability

High along entire planning unit.

Probability of Success

Good based on access, presence of existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve trails for easier access by 4x4 wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations. Remove heavy concentrations of brush within 100' of homes and primary lines.

Aircraft

Use of aircraft to protect homes is not anticipated for this unit. Aircraft maybe need to suppress fire. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, and a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics

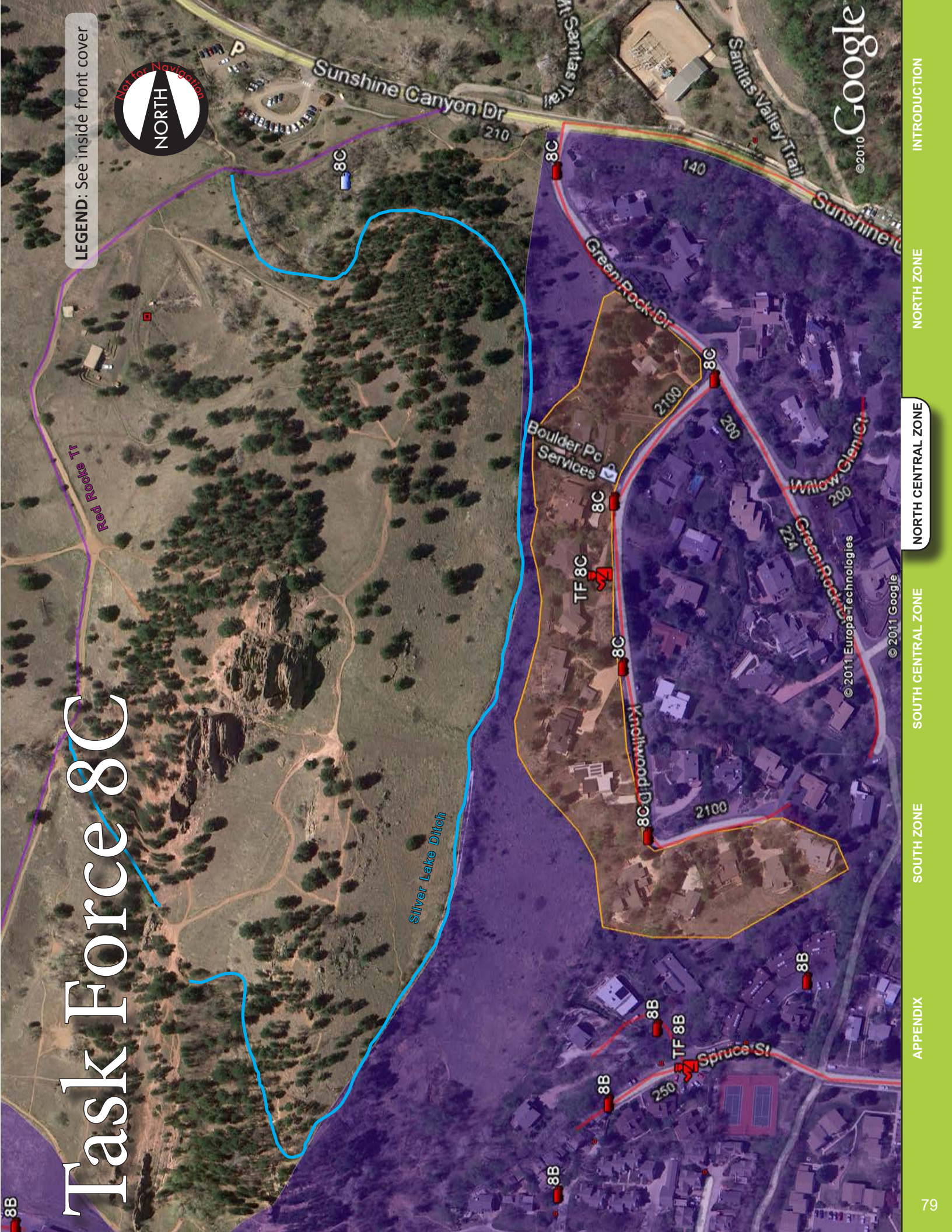
3 TASK FORCE LEADERS
10 ENGINES TYPE 1-3
5 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW (20-person)

2000' 1.5" HOSE,
1000' 1" HOSE,
10 1.5" GATED WYES W/ 1" REDUCERS
10 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	8C
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:	To:			
3. Branch			4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER						
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 8 CHARLIE			KNOLLWOOD		<input type="checkbox"/>	
ENG TYP 1-3			KNOLLWOOD		<input type="checkbox"/>	
ENG TYP 1-3			KNOLLWOOD		<input type="checkbox"/>	
ENG TYP 1-3			KNOLLWOOD		<input type="checkbox"/>	
ENG TYP 1-3			KNOLLWOOD		<input type="checkbox"/>	
ENG TYP 1-3			KNOLLWOOD		<input type="checkbox"/>	
ENG TYP 3-6			KNOLLWOOD		<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
7. ASSIGNMENTS						
1. HOLD RED ROCKS TRAIL 2. PROTECT STRUCTURES ALONG KNOLLWOOD AND GREENROCK DR						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel		Phone			
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

Task Force 8C

LEGEND: See inside front cover



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INTRODUCTION

NORTH ZONE

NORTH CENTRAL ZONE

SOUTH CENTRAL ZONE

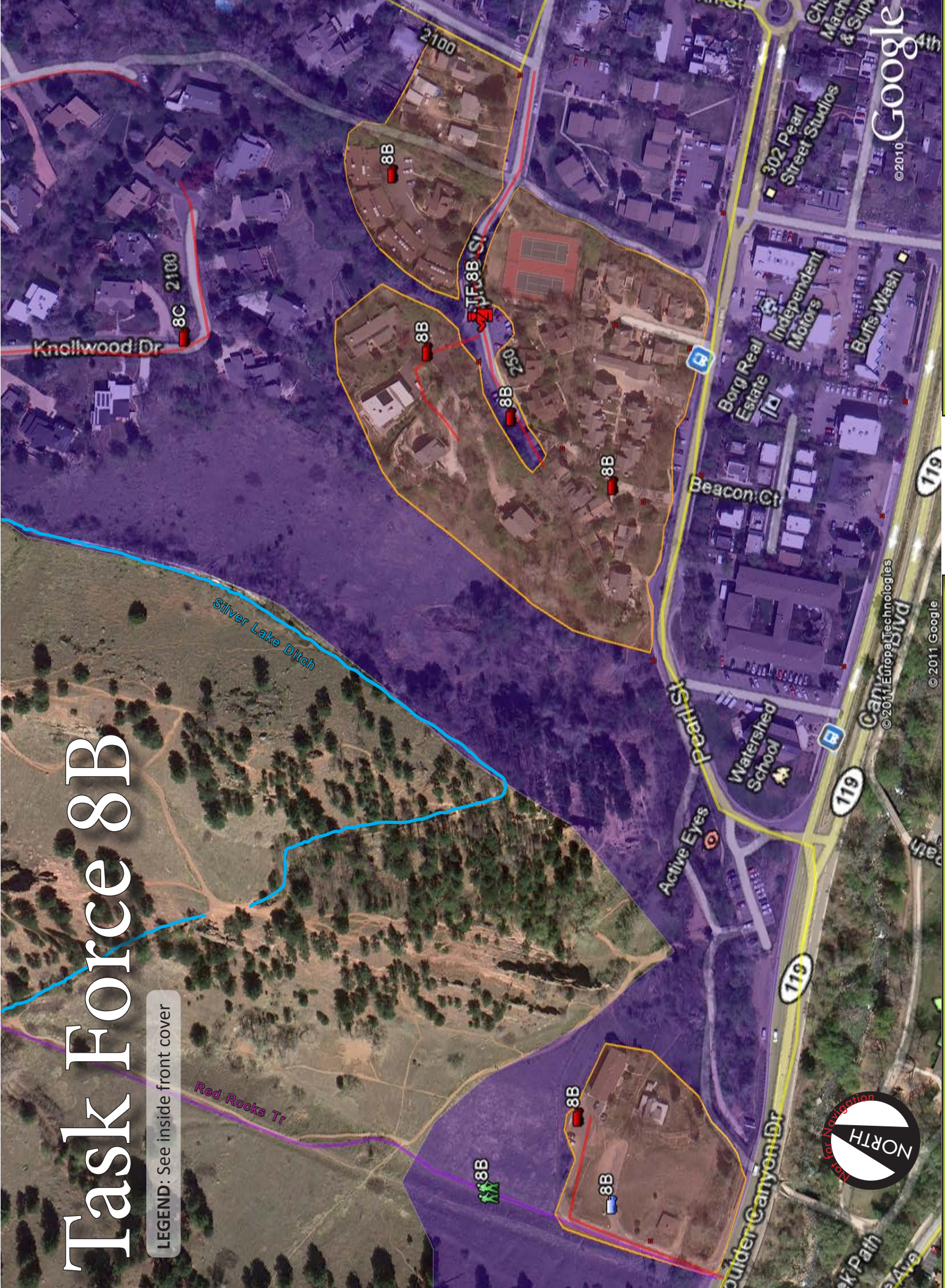
SOUTH ZONE

APPENDIX

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	8B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From: To:				
3. Branch			4. Division/Group			
CITY OF BOULDER			STRUCTURE GROUP			
5. Operations Personnel		NAME		Contact #(s)		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:				Critical wildland resources		
6. Resources Assigned This Period:						"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks			↓
TFLD 8 BRAVO			SPRUCE ST			<input type="checkbox"/>
ENG TYP 1-3			SPRUCE ST			<input type="checkbox"/>
ENG TYP 1-3			SPRUCE ST			<input type="checkbox"/>
ENG TYP 1-3			SPRUCE ST			<input type="checkbox"/>
ENG TYP 1-3			SPRUCE ST			<input type="checkbox"/>
ENG TYP 1-3			SPRUCE ST			<input type="checkbox"/>
ENG TYP 3-6			SPRUCE ST			<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
7. ASSIGNMENTS						
1. HOLD RED ROCKS TRAIL						
2. PROTECT STRUCTURES ALONG SPRUCE ST						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function		Radio: Freq. / System / Channel		Phone		
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

Task Force 8B

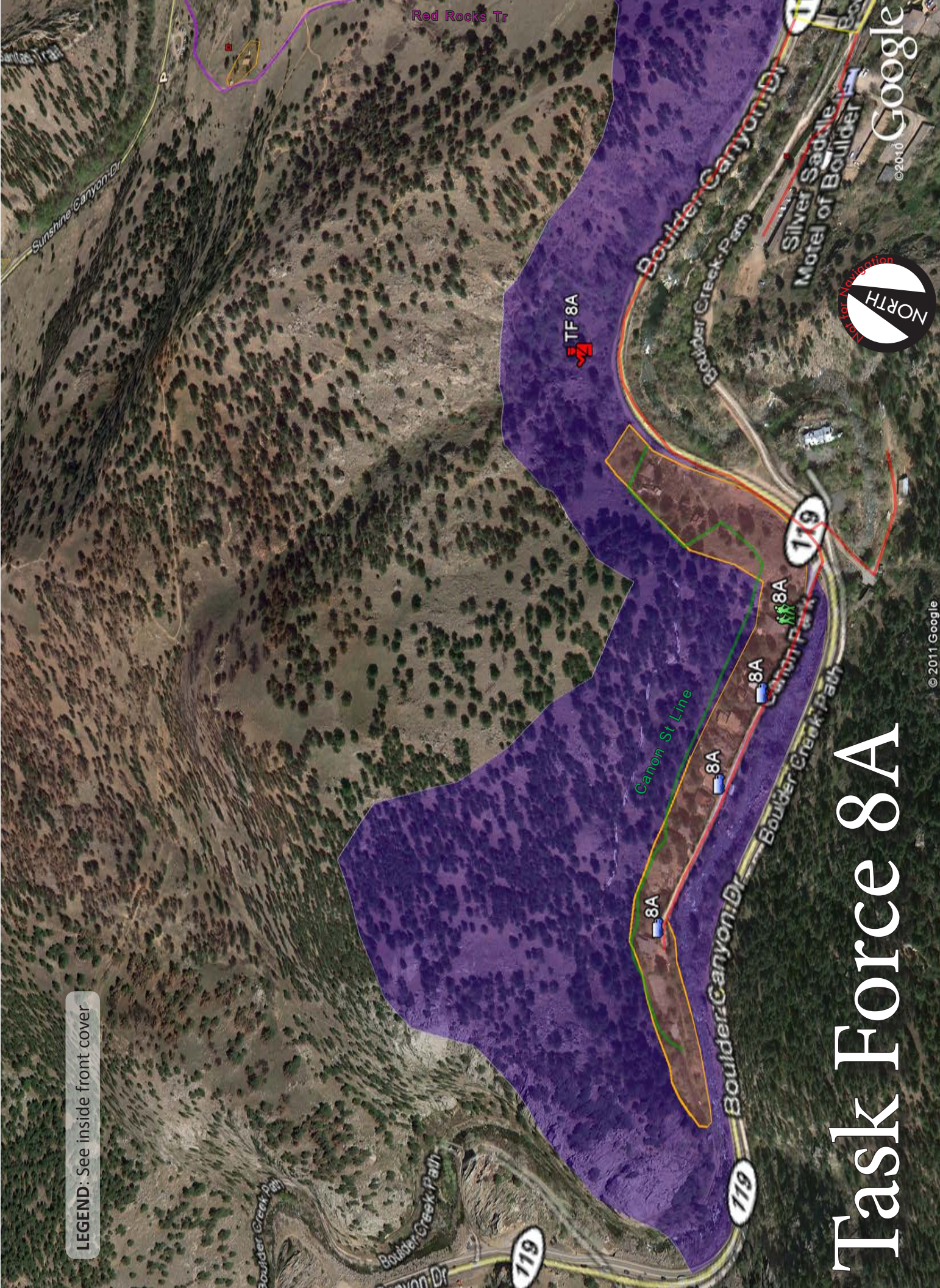
LEGEND: See inside front cover



ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	8A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:		To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 8 ALPHA			CANON PARK	<input type="checkbox"/>		
ENG TYP 1-3			CANON PARK	<input type="checkbox"/>		
ENG TYP 3-6			CANON PARK	<input type="checkbox"/>		
ENG TYP 3-6			CANON PARK	<input type="checkbox"/>		
ENG TYP 3-6			CANON PARK	<input type="checkbox"/>		
HANDCREW, SQUAD			CANON PARK	<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
1. CONSTRUCT (TBC) CANON PARK HANDLINE TO TIE INTO BOULDER CANYON CREEK . PLUMB AS NEEDED. 2. PROTECT STRUCTURES ALONG CANON PARK 3 LOW POWERLINES WILL NEED TO BE MITIGATED BEHIND STRUCTURES IN ORDER TO BACKFIRE. 4. ALTERNATIVE IS TO USE IRRIGATION DITCH ABOVE 100' ABOVE STRUCTURES. TERRAIN IS VERY STEEP AND THIS DEFENSIBLE FEATURE MAY NOT PROTECT AGAINST ROLL OUT.						
8. Special instructions						
1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. PLUMBING CANON PARK LINE WILL REQUIRE 1800' 1.5" HOSE, 900' 1" HOSE, 9 1.5"GATED WYES W/ 1" REDUCERS AND 9 1" NOZZLES						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function		Radio: Freq. / System / Channel		Phone		
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed

LEGEND: See inside front cover



Task Force 8A

Canyon Boulevard to Table Mesa Drive

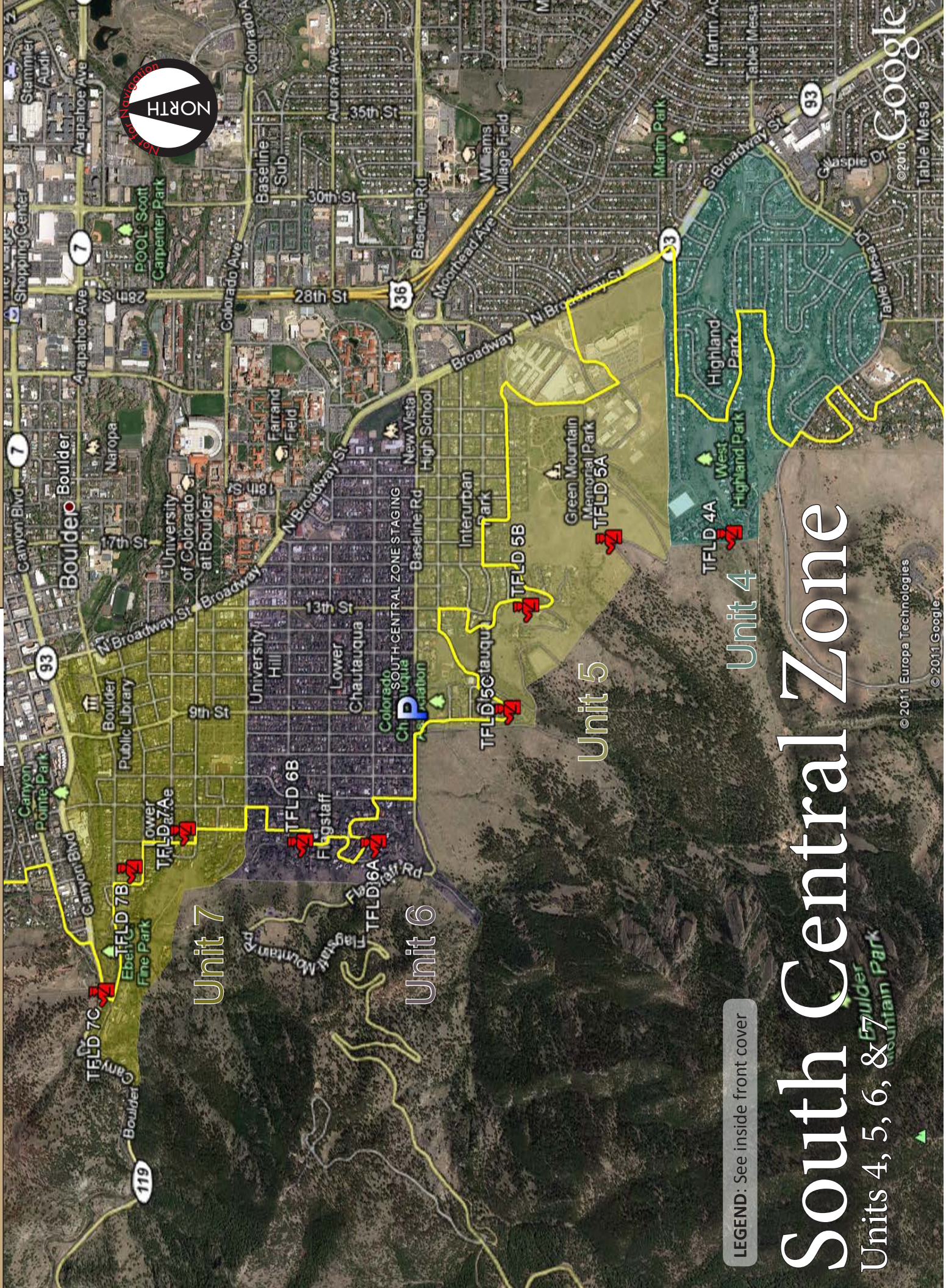
Units

4
5
6
7





SOUTH-CENTRAL ZONE



Unit 7

Unit 6

Unit 5

Unit 4

LEGEND: See inside front cover

South Central Zone

Units 4, 5, 6, & 7

South Central Zone Resources

Unit 4 Resources List

Personnel

- 7 ENGINES TYPE 1-3
- 1 ENGINE TYPE 3-6
- 1 HAND CREW SQUAD

Equipment

- 1500' 1.5" HOSE
- 700' 1" HOSE
- 7 1.5" GATED WYES WITH 7 1.5" TO 1" REDUCERS
- 7 1' NOZZLES

Unit 5 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 16 ENGINES TYPE 1-3
- 9 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20-person)
- 1 TYPE 2 OR BETTER HAND CREW SQUAD (6-person)

Equipment

- 2 Porta tanks
- 2700' 1.5" HOSE
- 1400' 1" HOSE
- 14 1.5" GATED WYES W/ 1" REDUCERS
- 14 1" NOZZLES

Unit 6 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 7 ENGINES TYPE 1-3
- 5 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20-person)

Equipment

- 2500' 1.5" HOSE
- 1500' 1" HOSE
- 15 1.5" GATED WYES W/ 1" REDUCERS
- 15 1" NOZZLES

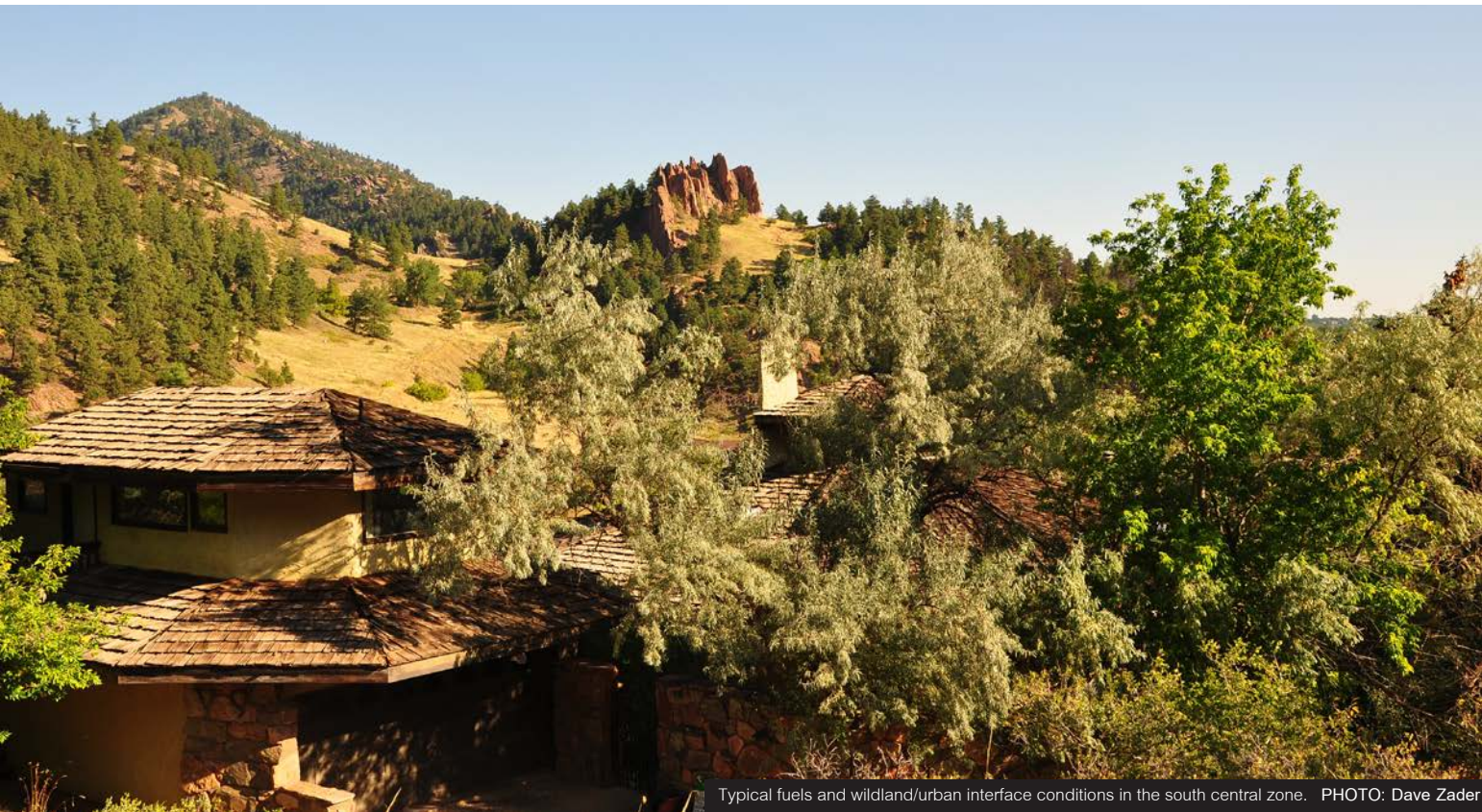
Unit 7 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 18 ENGINES TYPE 1-3
- 2 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW (20-person)

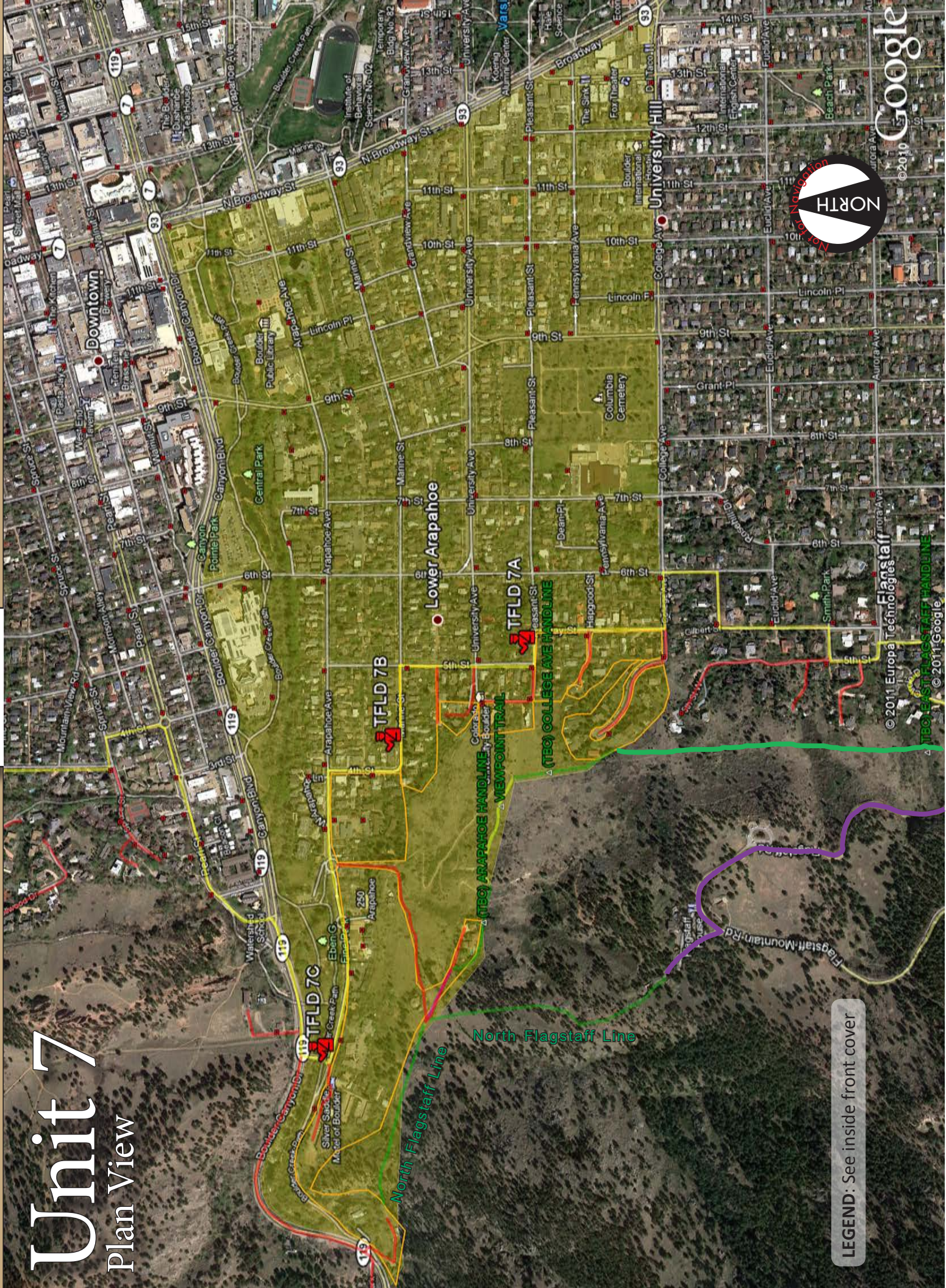
Equipment

- 3800' 1.5" HOSE
- 1900' 1" HOSE
- 19 1.5" GATED WYES W/ 1" REDUCERS
- 19 1" NOZZLES



Unit 7

Plan View



LEGEND: See inside front cover



Unit 7 Description

Planning Unit 7 is located on the west side of city of Boulder in the South Central Zone. It is located on the lower third of the north face of Flagstaff Mountain from College Ave in the south to Boulder Canyon in the north. Planning Unit 7 is composed of the Flatirons subdivision. It contains approximately 1.0 miles of urban interface edge.

Boundary

West end of College Avenue to Boulder Canyon

Threatened Structures:

Commercial: 10+

Residential: 81

Multifamily: 14+

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short Grasses), scattered sage, and yucca. Heavy pockets of Fuel Model 2 (ponderosa pine with grass and needle-cast understory) and heavy concentration of brush.

Community Layout

Densely-packed, very large single family structures, multi-family, and commercial structures with interspersed open space. Large pockets of wildland and ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Central Zone staging located at Chautauqua Park on Baseline Road.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in yellow polygon.

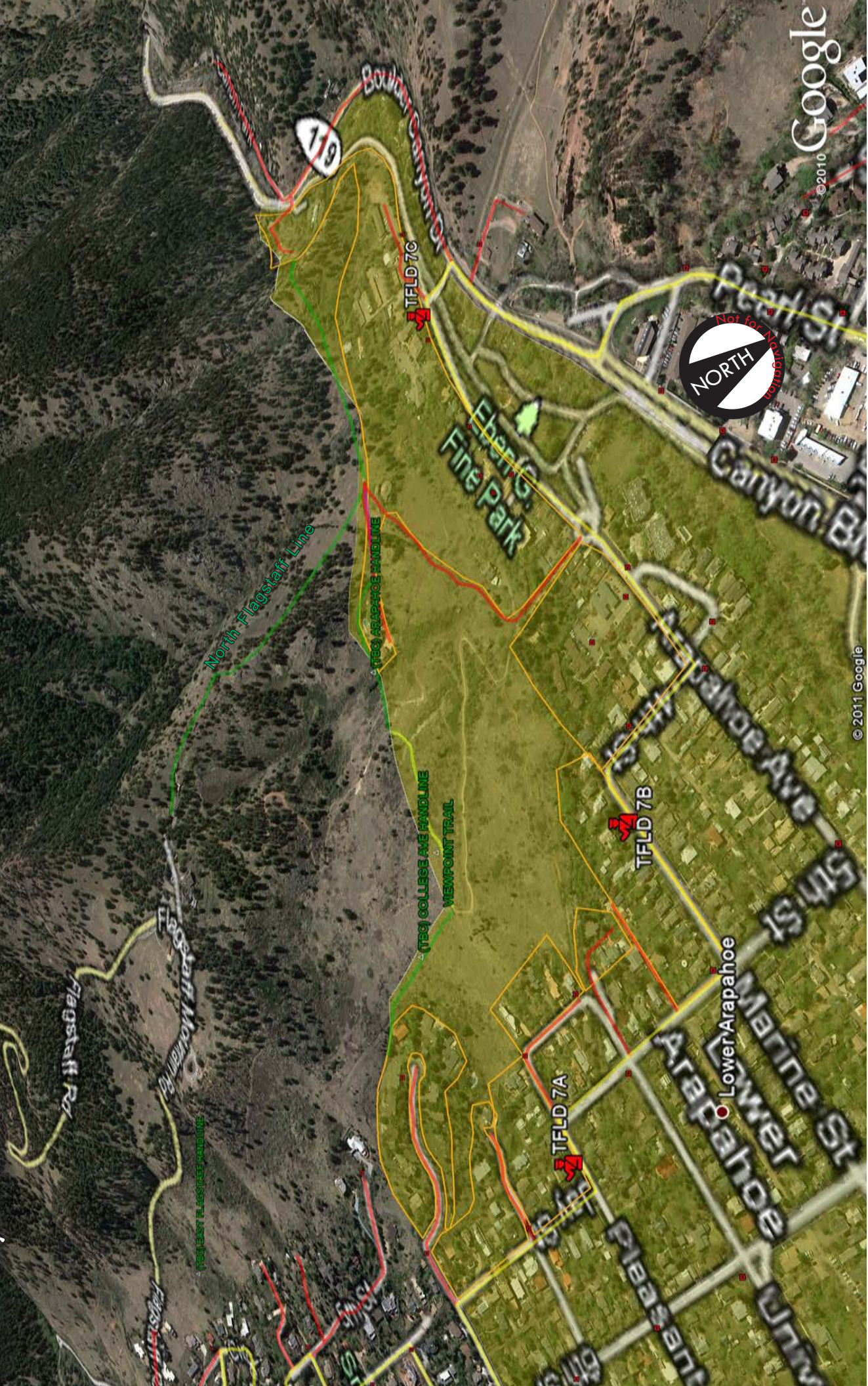
Defensible space

Poor along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Unit 7

Bird's Eye View

LEGEND: See inside front cover



Access

Open space land not accessible to 4x4 vehicles in most areas. Some structural protection engines need to be of Type 3 to 6 and must back into most streets as most are one way in and out. Major construction of line will be needed for complete coverage. Plumbing of line locations will be mandatory in most line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to interspersed fuels between homes. An alternative line could be made using Flagstaff Road and constructing line from the Flagstaff House down the north face of Flagstaff Mountain to Boulder Creek.

Fire Probability

Very High along entire planning unit.

Probability of Success

Very poor based on access, lack of existing defensible features. Complicated underslung line locations. Heavy concentrations of fuel between homes.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Install trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations. Remove heavy concentrations of brush within 100' of homes and primary lines.

Aircraft

Use of heavy concentrations of retardant (5,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$50,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant. This unit has a less extensive system of hydrants and line locations are far from adequate water supplies. One isolated structure does have a 10,000+ gallon pool.

Logistics

3 TASK FORCE LEADERS
 18 ENGINES TYPE 1-3
 2 ENGINES TYPE 3-6
 1 TYPE 2 OR BETTER HAND CREW (20-person)

3800' 1.5" HOSE
 1900' 1" HOSE
 19 1.5" GATED WYES W/ 1" REDUCERS
 19 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	7C
1. Incident Name: PREPLAN			2. Operational Period (Date / Time)			
			From:	To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 7 CHARLIE			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 1-3			EBEN G. FINE PARK	<input type="checkbox"/>		
ENG TYP 3-6			EBEN G. FINE PARK	<input type="checkbox"/>		
HANDCREW, TYPE 2+			SHARE WITH TASKFORCE 7 ALPHA	<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
<p>1. ASSIST IN CONSTRUCT (TBC) NORTH FLAGSTAFF HANDLINETO TIE INTO BOULDER CANYON CREEK PATH. PLUMB AS NEEDED.</p> <p>2. PROTECT STRUCTURES ALONG ARAPAHOE AVE. INCLUDING TWO ON NORTH SLOPE OF FLAGSTAFF AND SOUTH OF BOULDER CANYON HIGHWAY</p>						
8. Special instructions						
<p>1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.</p> <p>2. COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY ON STRUCTURE PROTECTION ALONG FLAGSTFF ROAD TO THE WEST.</p> <p>3. PLUMBING NORTH FLAGSTAFF LINE WILL REQUIRE 1500' 1.5" HOSE, 800' 1" HOSE, 8 1.5"GATED WYES W/ 1" REDUCERS AND 8 1" NOZZLES</p>						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



LEGEND: See inside front cover

Task Force 7C

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ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	7B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:	To:			
3. Branch			4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER						
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 7 BRAVO					<input type="checkbox"/>	
ENG TYP 1-3			4TH AND MARINE ST		<input type="checkbox"/>	
ENG TYP 1-3			4TH AND MARINE ST		<input type="checkbox"/>	
ENG TYP 1-3			4TH AND MARINE ST		<input type="checkbox"/>	
ENG TYP 1-3			4TH AND MARINE ST		<input type="checkbox"/>	
ENG TYP 1-3			4TH AND MARINE ST		<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
HANDCREW, TYPE 2+			SHARE WITH TASKFORCE 7 ALPHA		<input type="checkbox"/>	
					<input type="checkbox"/>	
7. ASSIGNMENTS						
<ol style="list-style-type: none"> ASSIST IN CONSTRUCTION OF (TBC) WEST COLLEGE HANDLINE FROM WEST END OF COLLEGE AVE TO VIEWPOINT TRAIL ASSIST IN IMPROVEMENT OF VIEWPOINT TRAIL TO THE WEST. ASSIST IN CONSTRUCTION (TBC) ARAPAHOE AVE HANDLINE , ASSIST IN CONSTRUCT (TBC) NORTH FLAGSTAFF HANDLINETO TIE INTO BOULDER CANYON CREEK PATH. PLUMB AS NEEDED. PROTECT STRUCTURES ALONG 5TH ST, MARINE ST, 4TH ST, 						
8. Special instructions						
<ol style="list-style-type: none"> OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY ON STRUCTURE PROTECTION ALONG FLAGSTFF ROAD TO THE WEST. PLUMBING ARAPAHOE/VIEWPOINT LINE WILL REQUIRE 1500' 1.5" HOSE, 800' 1" HOSE, 8 1.5"GATED WYES W/ 1" REDUCERS AND 8 1" NOZZLES 						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



LEGEND: See inside front cover

Task Force 7B



INTRODUCTION

NORTH ZONE

NORTH CENTRAL ZONE

SOUTH CENTRAL ZONE

SOUTH ZONE

APPENDIX

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	7A
1. Incident Name: PREPLAN			2. Operational Period (Date / Time)			
			From:	To:		
3. Branch			4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER						
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 7 ALPHA			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENG TYP 1-3			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENG TYP 1-3			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENG TYP 1-3			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENG TYP 1-3			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENG TYP 1-3			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENG TYP 1-3			PLEASANT AND JAY ST		<input type="checkbox"/>	
ENGINE TYP 3-6			PLEASANT AND JAY ST		<input type="checkbox"/>	
HANDCREW, TYPE 2+			WEST END COLLEGE AVE		<input type="checkbox"/>	
					<input type="checkbox"/>	
7. ASSIGNMENTS						
1. CONSTRUCT (TBC) WEST COLLEGE HANDLINE FROM WEST END OF COLLEGE AVE TO VIEWPOINT TRAIL TO THE NORTH 2. IMPROVE VIEWPOINT TRAIL TO THE WEST 3. CONSTRUCT (TBC) ARAPAHOE AVE HANDLINE 4. CONSTRUCT (TBC) NORTH FLAGSTAFF HANDLINETO TIE INTO BOULDER CANYON CREEK PATH. PLUMB AS NEEDED.						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. COORDINATE WITH ROCKY MT. FIRE AUTHORITY ON STRUCTURE PROTECTION ALONG FLAGSTAFF ROAD TO THE WEST. 3. PLUMBING COLLEGE AVE LINE WILL REQUIRE 800' 1.5" HOSE, 400' 1" HOSE, 4 1.5"GATED WYES W/ 1" REDUCERS AND 4 1" NOZZLES						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



LEGEND: See inside front cover

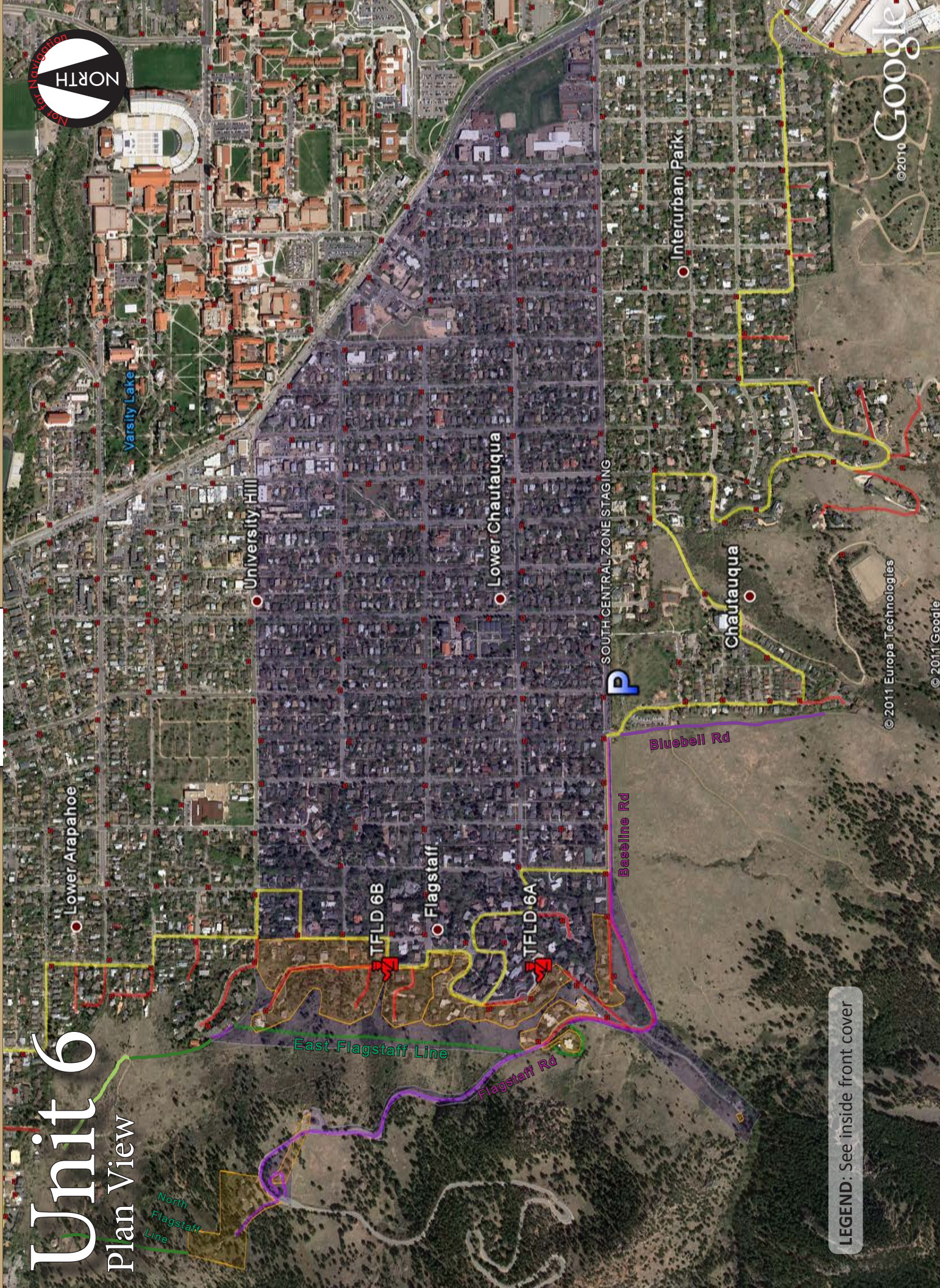


Task Force 7A

Unit 6

Plan View

APPENDIX SOUTH ZONE SOUTH CENTRAL ZONE NORTH CENTRAL ZONE NORTH ZONE INTRODUCTION



LEGEND: See inside front cover

Unit 6 Description

Planning Unit 6 is located on the central west side of city of Boulder in the South Central Zone. It is located on the lower third of the east face of Flagstaff Mountain from Chautauqua Meadow and Gregory Canyon in the South to College Avenue in the north. Planning Unit 6 is composed of the Grant subdivision. It contains approximately .6 miles of urban interface edge.

Boundary

Kinnikinik (Kinny-Kin-*Ick*) Rd and Baseline Road to west end of College Avenue

Threatened Structures

Commercial: 1

Residential: 51

Multifamily: 0

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca are most prevalent with some pockets of Fuel Model 2 (ponderosa with grass and needle-cast understory). Heavy concentration of brush.

Community Layout

Densely-packed, very large single family structures with interspersed open space. Large pockets of wildland and ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Central Zone staging located at Chautauqua Park on Baseline Road.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in yellow polygon.

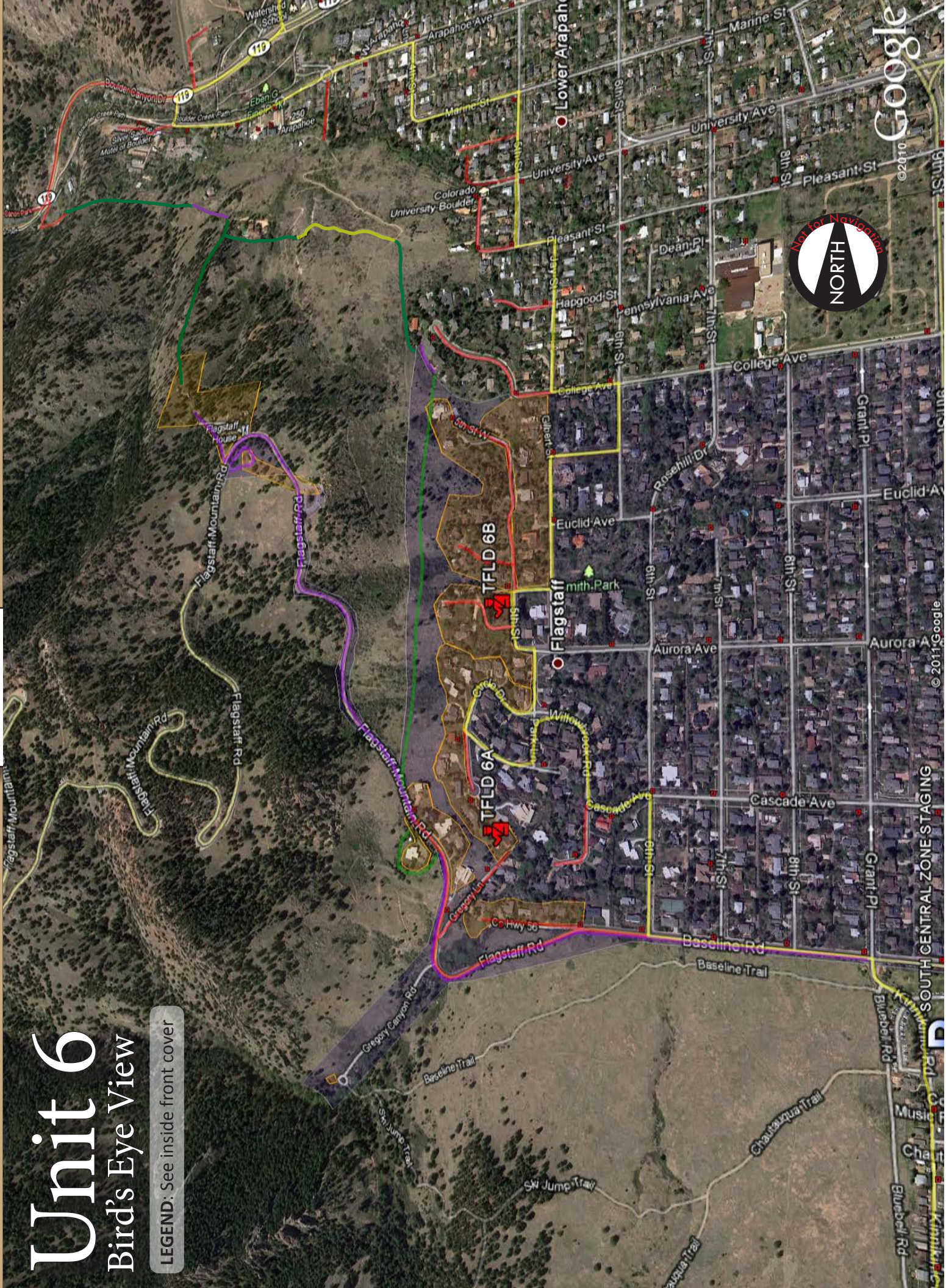
Defensible Space

Poor along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Unit 6

Bird's Eye View

LEGEND: See inside front cover



Access

Open space land not accessible to 4x4 vehicles in any areas. Structural protection engines need to be of Type 3-6 and must back into most streets as most are one way in and out. Major construction of line will be needed for complete coverage. Plumbing of line locations will be mandatory in most line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to interspersed fuels between homes. An alternative line could be made using Flagstaff Road and constructing line from the Flagstaff House down the north face of Flagstaff Mountain to Boulder Creek.

Fire Probability

Very High along entire planning unit.

Probability of Success

Very poor based on access, lack of existing defensible features. Heavy concentrations of fuel between homes.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Install trails for easier access by 4x4 wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations. Remove heavy concentrations of brush within 100' of homes and primary lines.

Aircraft

Use of heavy concentrations of retardant (10,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$100,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant. This unit has a less extensive system of hydrants.

Logistics

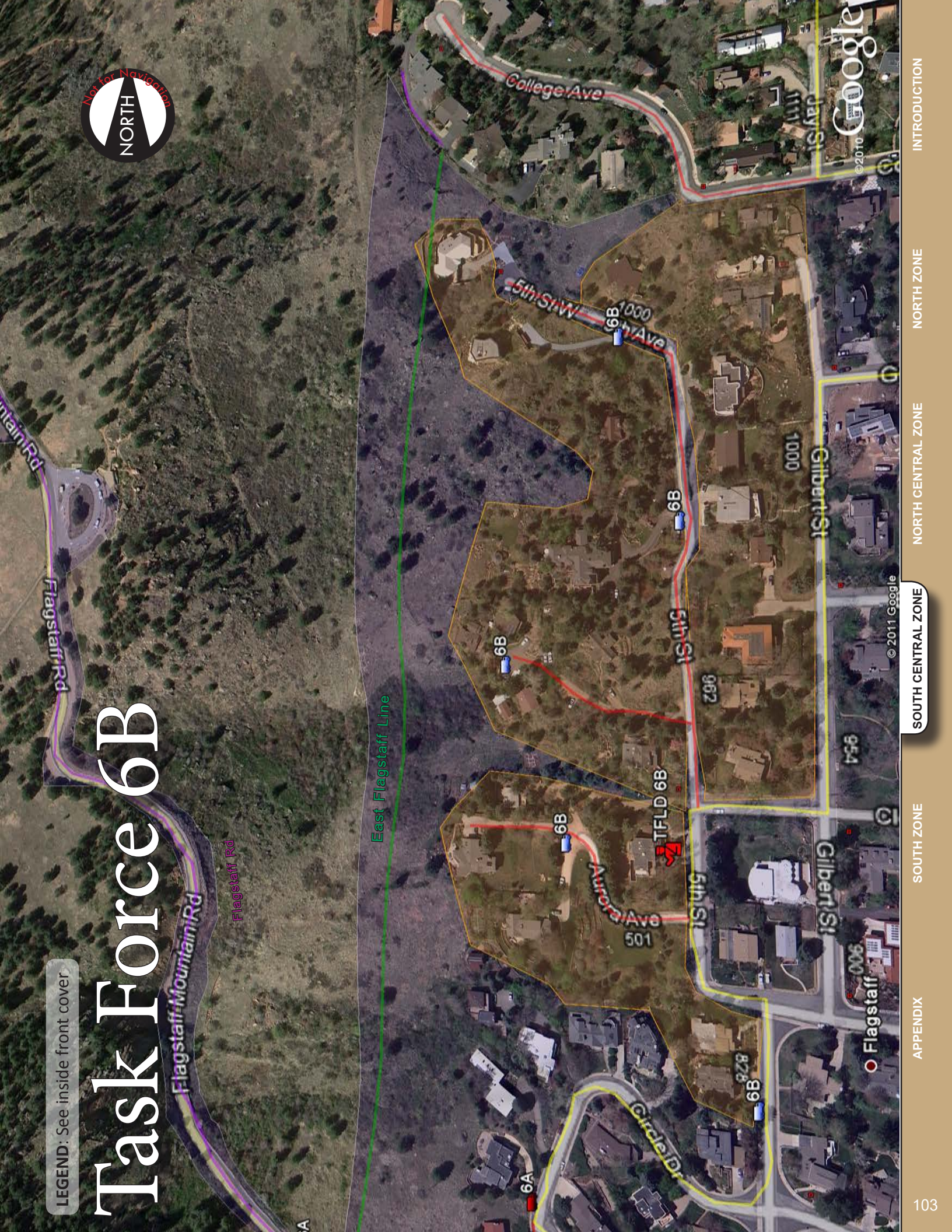
3 TASK FORCE LEADERS
7 ENGINES TYPE 1-3
5 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW (20-person)

2500' 1.5" HOSE
1500' 1" HOSE
15 1.5" GATED WYES W/ 1" REDUCERS
15 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	6B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:		To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 6 BRAVO			CIRCLE DR AND PARK LN	<input type="checkbox"/>		
ENG TYP 3-6			CIRCLE DR AND PARK LN	<input type="checkbox"/>		
ENG TYP 3-6			CIRCLE DR AND PARK LN	<input type="checkbox"/>		
ENG TYP 3-6			CIRCLE DR AND PARK LN	<input type="checkbox"/>		
ENG TYP 3-6			CIRCLE DR AND PARK LN	<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
HANDCREW, TYPE 2+			SHARE WITH TASKFORCE 6 ALPHA	<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
1. ASSIST TASKFORCE 6 ALPHA IN CONSTRUCTION OF (TBC) EAST FLAGSTAFF HANDLINE FROM 800 FLAGSTAFF RD TO COLLEGE AVE. PLUMB AS NEEDED.						
3. PROTECT STRUCTURES ALONG AURORA AVE, 5TH ST, GILBERT ST, AND COLLEGE AVE.						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
2. COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY ON STRUCTURE PROTECTION ALONG FLAGSTAFF ROAD TO THE WEST.						
3. HOSE LAY WILL REQUIRE 3000' 1.5" HOSE, 1500' 1" HOSE, 15 GATED WYES W/ 1.5 TO 1" REDUCERS, AND 15 1" NOZZLES.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief) Date / Time			
Assignment List			ICS 204 -BFD REVISED June 2011			

LEGEND: See inside front cover

Task Force 6B

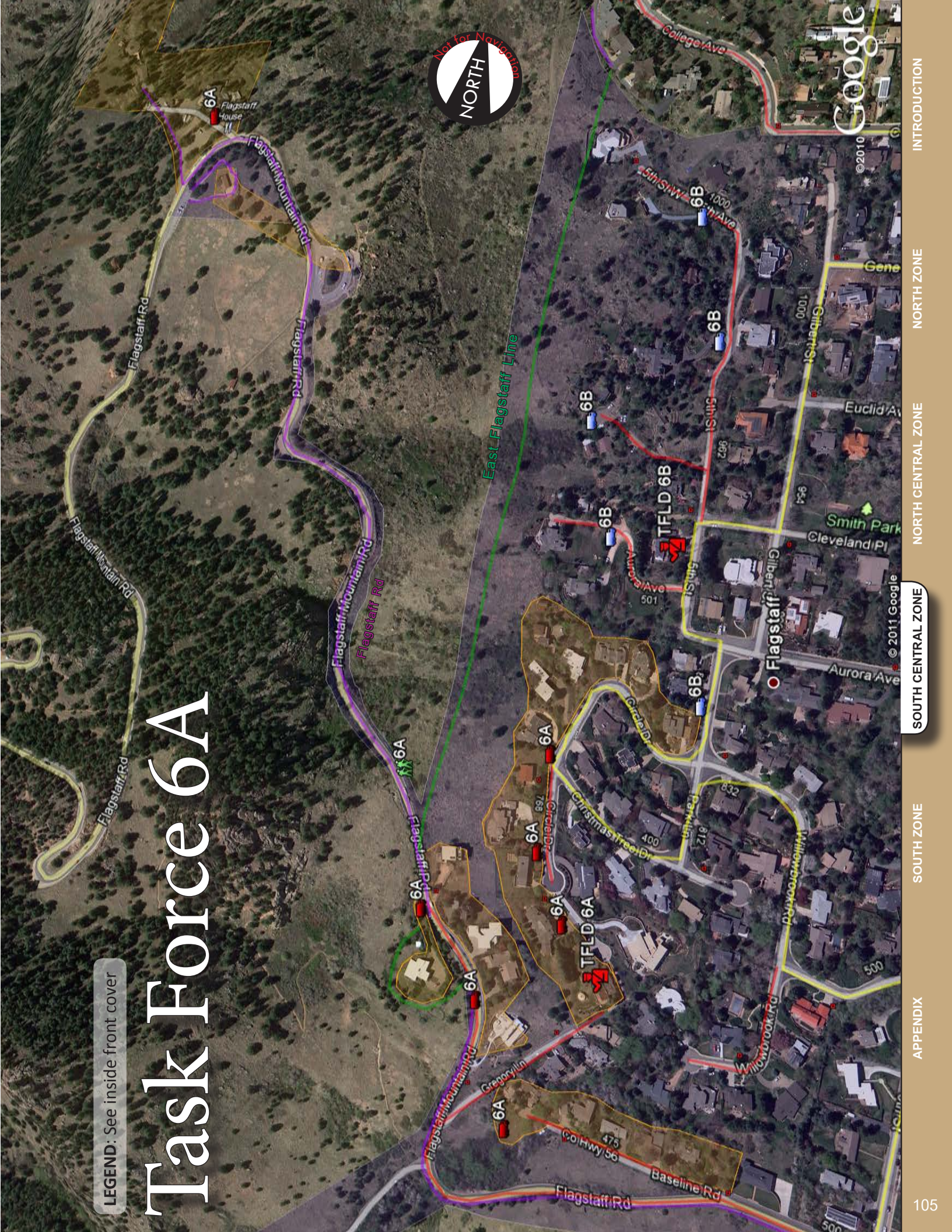


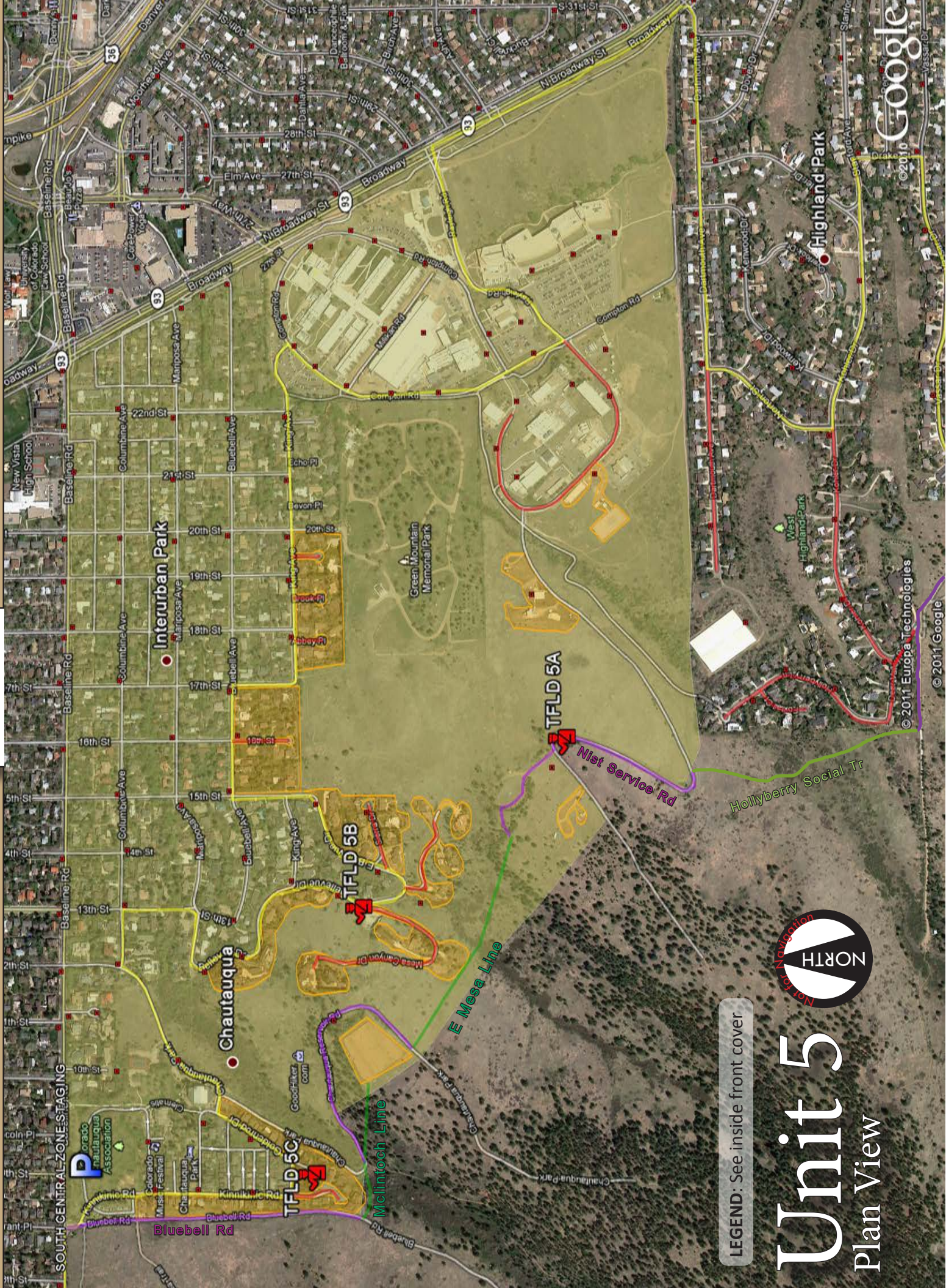
ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	6A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:	To:			
3. Branch			4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER						
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 6 ALPHA			CIRCLE DR AND PARK LN		<input type="checkbox"/>	
ENG TYP 1-3			CIRCLE DR AND PARK LN		<input type="checkbox"/>	
ENG TYP 1-3			CIRCLE DR AND PARK LN		<input type="checkbox"/>	
ENG TYP 1-3			CIRCLE DR AND PARK LN		<input type="checkbox"/>	
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ENG TYP 1-3			CIRCLE DR AND PARK LN		<input type="checkbox"/>	
ENG TYP 1-3			CIRCLE DR AND PARK LN		<input type="checkbox"/>	
HANDCREW, TYPE 2+			GREGORY LN AND FLAGSTAFF		<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
7. ASSIGNMENTS						
1. CONSTRUCT (TBC) EAST FLAGSTAFF HANDLINE FROM 800 FLAGSTAFF RD TO COLLEGE AVE. PLUMB AS NEEDED. TASK FORCE 6 BRAVO TO ASSIST. (ALTERNATE) USE FLAGSTAFF RD AND CONSTRUCT FLAGSTAFF HOUSE LINE. 2. HOLD BASELINE RD, AND FLAGSTAFF RD 3. MITIGATE BATHROOM FACILITIES AT GREGORY CANYON AND PANORAMIC POINT. 3. PROTECT STRUCTURES ALONG AURORA AVE, 5TH ST, GILBERT ST, AND COLLEGE AVE						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY ON STRUCTURE PROTECTION ALONG FLAGSTAFF ROAD TO THE WEST. 3. HOSE LAY WILL REQUIRE 3000' 1.5" HOSE, 1500' 1" HOSE, 15 GATED WYES W/ 1.5 TO 1" REDUCERS, AND 15 1" NOZZLES.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel		Phone			
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed

LEGEND: See inside front cover

Task Force 6A





LEGEND: See inside front cover



Unit 5

Plan View

Unit 5 Description

Planning Unit 5 is located on the central west side of city of Boulder in the South Central Zone. It is located on Enchanted Mesa (“E Mesa”) bordered by Skunk Canyon to the south and Chautauqua Meadow to the north. Planning Unit 5 is composed of NIST, Bellevue and Chautauqua Park subdivisions. It contains approximately 1.2 miles of urban interface edge.

Threatened Structures

Commercial: 2

Residential: 96

Multifamily: 0

Target hazards: 1

Critical infrastructure: 1

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca is most prevalent with some thick and thinned pockets of Fuel Model 2 (ponderosa with grass and needle-cast understory), heavy concentration of brush and riparian vegetation located in Skunk Canyon, Bluebell Canyon, and smaller sub-drainages.

Community Layout

Densely-packed, single family structures with interspersed open space, pockets of ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Central Zone staging located at Chautauqua Park on Baseline Road.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in yellow polygon.

Defensible Space

Good along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

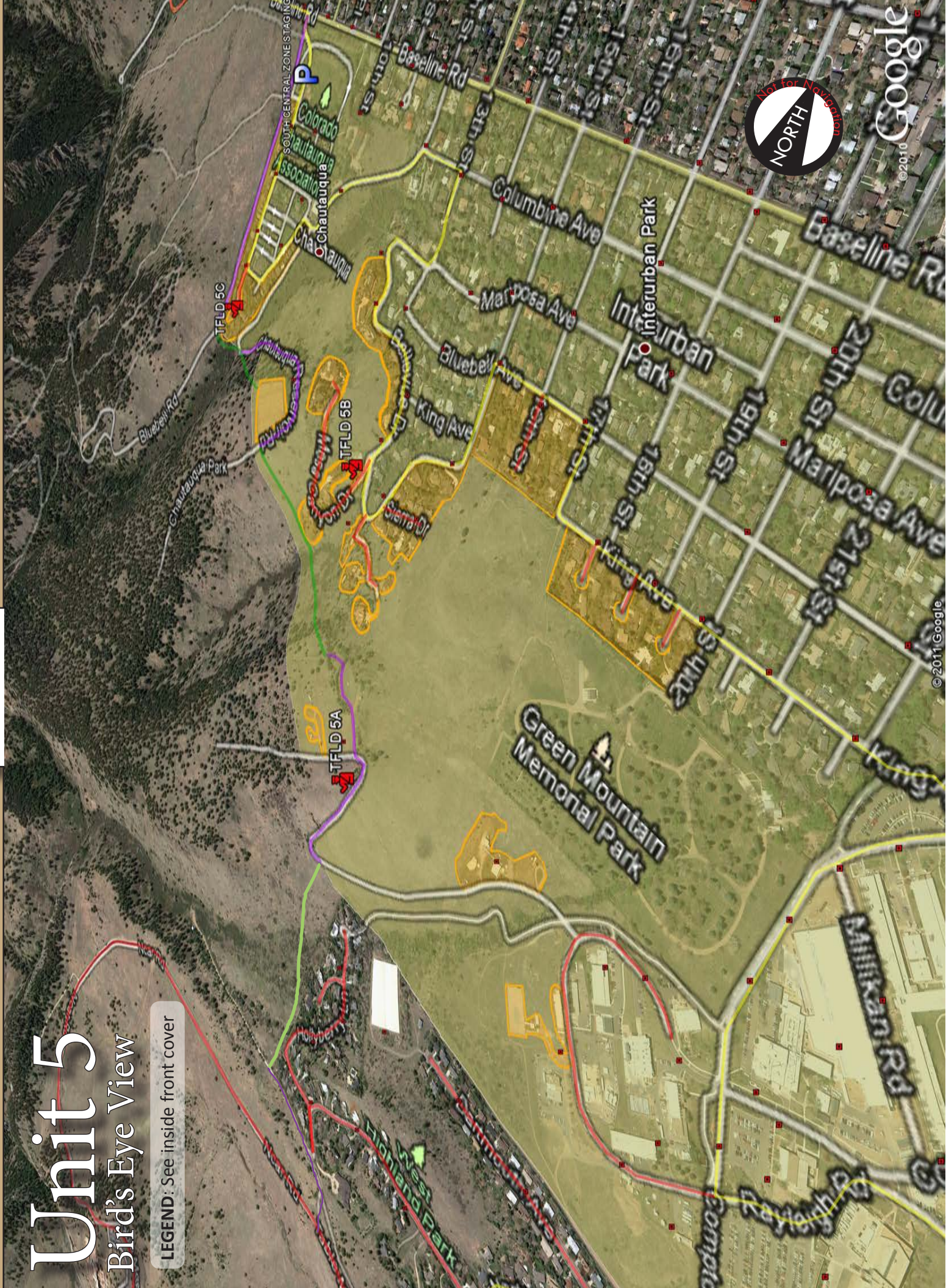
Access

Open space land accessible to 4x4 vehicles in some areas. Open space trails and roads provide needed fire break in portions of Unit 5. Major construction of line will be needed for complete coverage. Plumbing of

Unit 5

Bird's Eye View

LEGEND: See inside front cover



Google

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line locations will be mandatory in most line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to current trail and road locations.

Fire Probability

Very High along entire planning unit.

Probability of Success

Fair based on access, existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve existing trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations.

Aircraft

Use of heavy concentrations of retardant (7,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$70,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant. This units' defensive features are far from most hydrants and free-standing tanks may be needed to support hose lays.

Logistics

3 TASK FORCE LEADERS

16 ENGINES TYPE 1-3

9 ENGINES TYPE 3-6

1 TYPE 2 OR BETTER HAND CREW (20-person)

1 TYPE 2 OR BETTER HAND CREW SQUAD (6-person)

2 Porta tanks

2700' 1.5" HOSE,

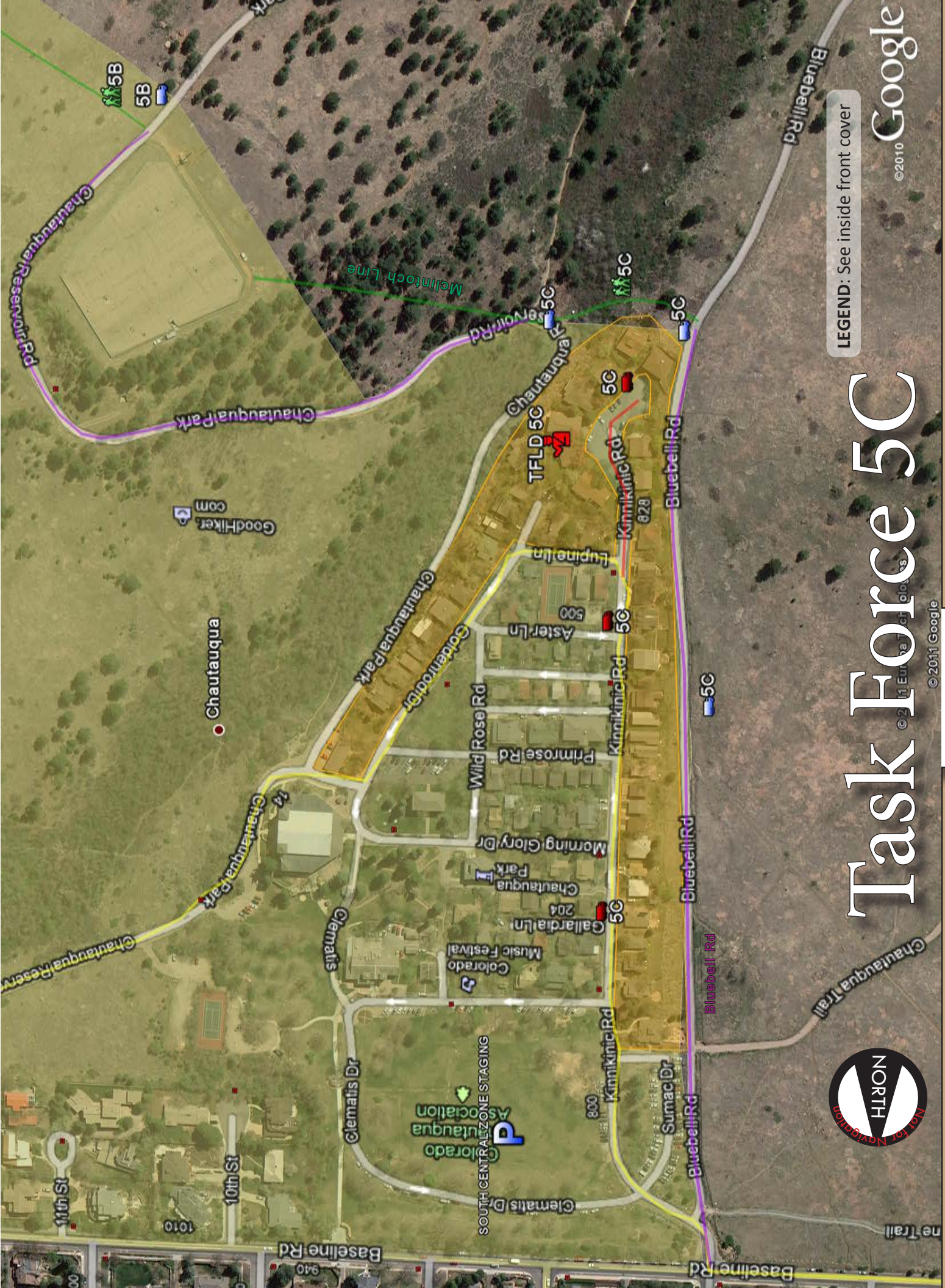
1400' 1" HOSE,

14 1.5" GATED WYES W/ 1" REDUCERS

14 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	5C
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:		To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 5 CHARLIE			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
ENG TYP 1-3			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
ENG TYP 1-3			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
ENG TYP 1-3			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
ENG TYP 3-6			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
ENG TYP 3-6			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
ENG TYP 3-6			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
HANDCREW, SQUAD			CHATAQUA RANGER COTTAGE	<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
1. CONSTRUCT (TBC) MCCLINTOCH HANDLINE FROM BLUEBELL RD TO RESERVIOR ACCESS RD. 2. HOLD BLUEBELL RD AND CHAUTAQUA PARK FIRE ROAD 3. PROTECT STRUCTURES ALONG "KINNI-KI-NIC "RD, LUPINE LN, AND GOLDEN DR.						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 3. PLUMBING MCLINTOCH LINE WILL REQUIRE 1200' 1.5" HOSE, 600' 1" HOSE, 6 1.5" GATED WYES W/ 1" REDUCERS AND 6 1" NOZZLES						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



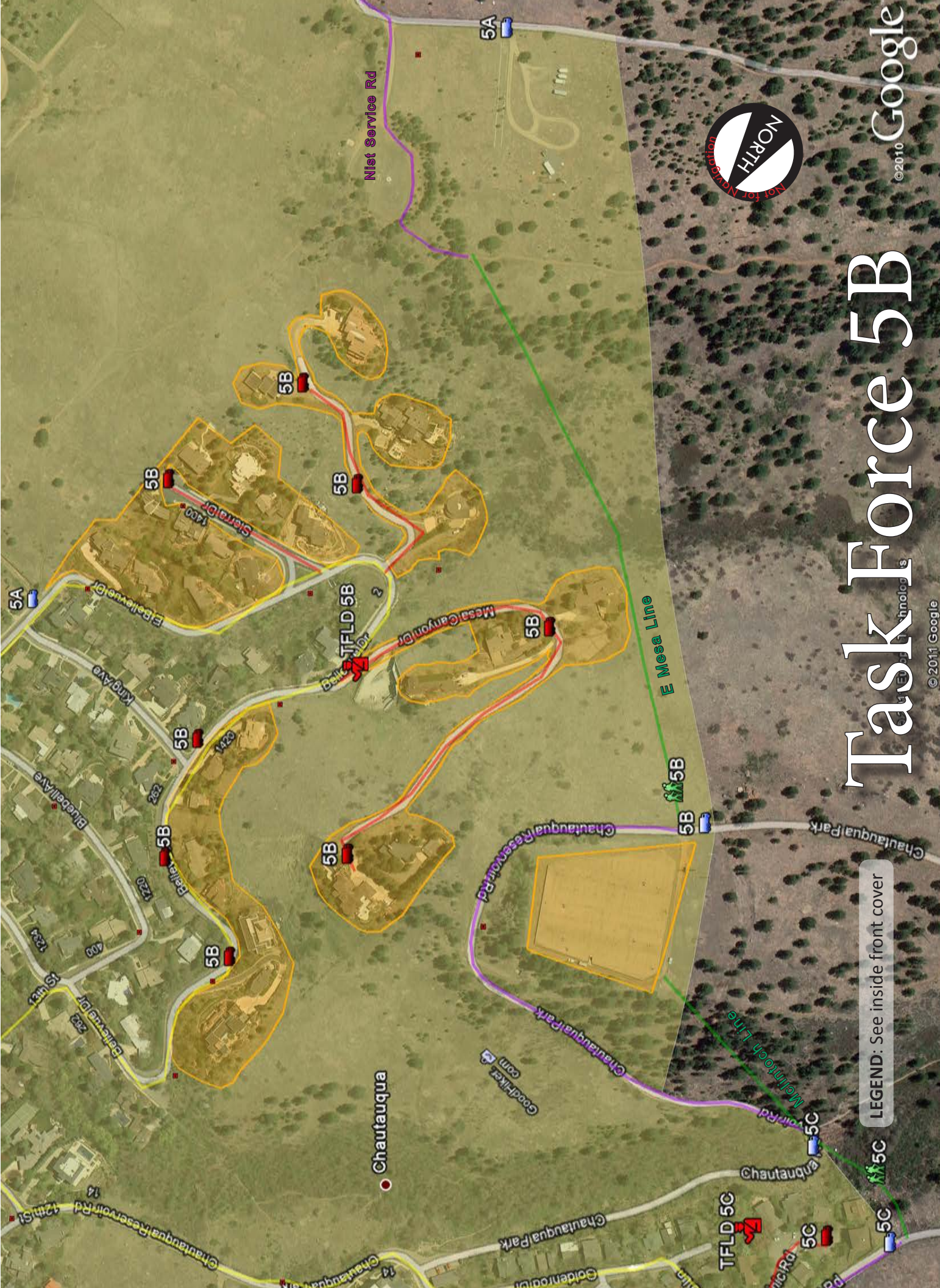
Task Force 5C

LEGEND: See inside front cover

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ASSIGNMENT LIST ICS-204		PAGE	1 OF	PLANNING UNIT	5B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)			
		From:	To:		
3. Branch		4. Division/Group		STRUCTURE GROUP	
CITY OF BOULDER					
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources	
Operations Section Chief:					
Branch Director:					
Division/Group Supervisor:					
6. Resources Assigned This Period:		"X" indicates 204a attachment with special instructions			
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓	
TFLD 5 BRAVO			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 1-3			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
ENG TYP 3-6			BELLEVUE AND MESA CANYON DR	<input type="checkbox"/>	
HANDCREW, TYPE 2+				<input type="checkbox"/>	
7. ASSIGNMENTS					
1. CONSTRUCT ENCHANTED MESA HANDLINE					
2. PROTECT STRUCTURES ALONG MESA CANYON DR, BELLEVUE DR, E BELLEVUE DR, SIERRA DR					
8. Special instructions					
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.					
3. PLUMBING E MESA LINE WILL REQUIRE 1500' 1.5" HOSE, 800' 1" HOSE, 8 1.5" GATED WYES W/ 1" REDUCERS AND 8 1" NOZZLES					
9. Communications (radio and/or phone contact numbers needed for this assignment)					
Name / Function	Radio: Freq. / System / Channel	Phone			
Command					
Tactical					
Air to Ground					
Emergency Commo					
Medical					
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011			

TBC To be constructed



Task Force 5B

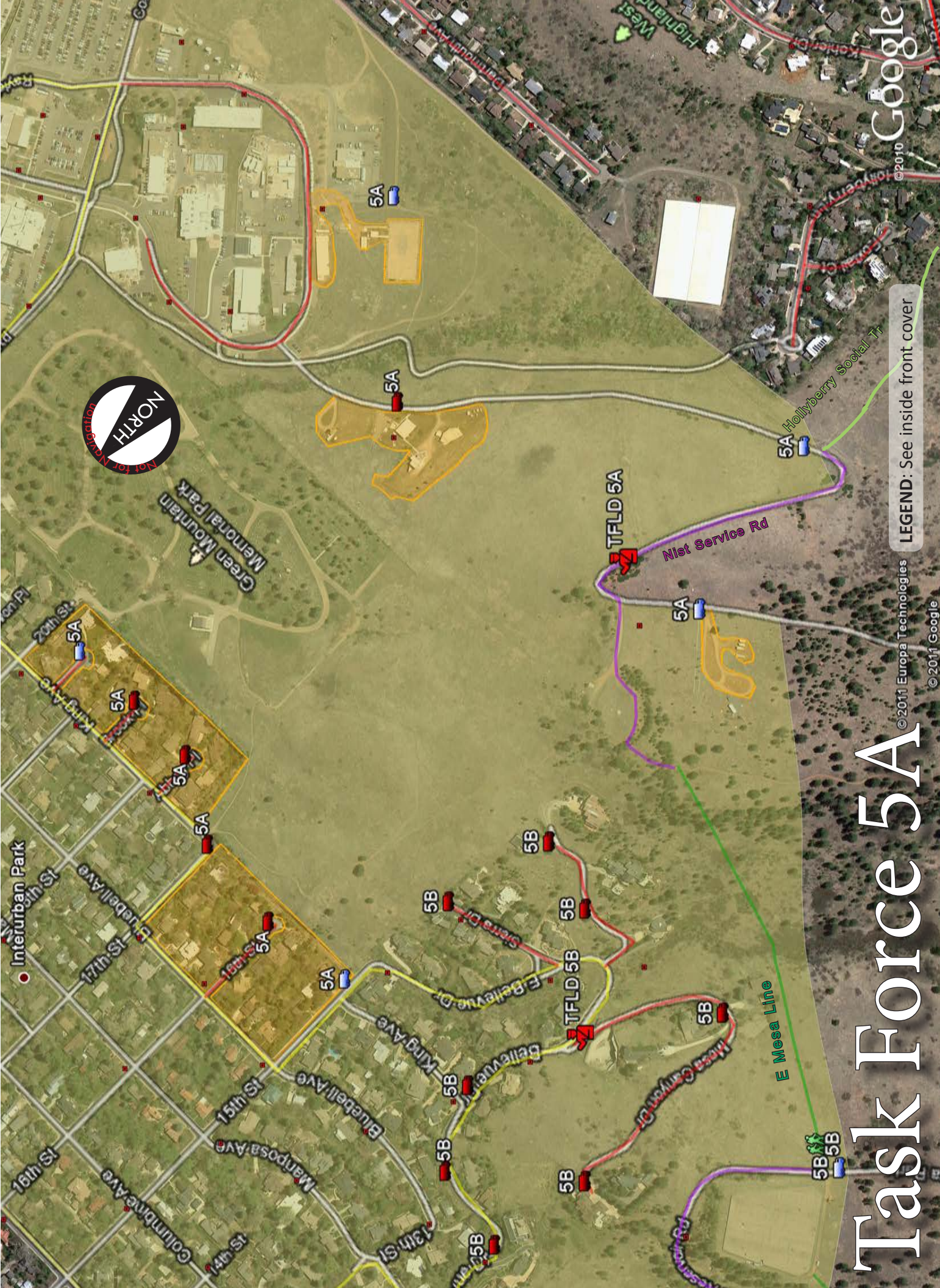
LEGEND: See inside front cover



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ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	5A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:	To:			
3. Branch			4. Division/Group			
CITY OF BOULDER			STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 5 ALPHA			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 1-3			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 1-3			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 1-3			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 1-3			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 3-6			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 3-6			17TH ST AND KING AVE	<input type="checkbox"/>		
ENG TYP 1-3			NIST	<input type="checkbox"/>		
ENG TYP 3-6			NIST	<input type="checkbox"/>		
ENG TYP 3-6			NIST	<input type="checkbox"/>		
ENG TYP 3-6			NIST	<input type="checkbox"/>		
7. ASSIGNMENTS						
1. HOLD NIST ACCESS RD 2. PROTECT STRUCTURES AT NIST AND ALONG KING AVE, 15TH, 16TH, 17TH AND BLUEBELL AVENUE 3. ASSIST IN CONSTRUCTION OF ENCHANTED MESA HANDLINE						
8. Special instructions						
1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



LEGEND: See inside front cover

Task Force 5A



LEGEND: See inside front cover



Unit 4

Plan View

Unit 4 Description

Planning Unit 4 is located on the far west side of city of Boulder in the South Central Zone. It is located in Skunk Canyon between Table Mesa and Enchanted Mesa (“E Mesa”). Planning Unit 3 is composed of the Enchanted Mesa subdivision. It contains approximately .5 miles of urban interface edge.

Boundary

Drake Street & Regis to Dartmouth Avenue & Broadway

Threatened Structures

Commercial: 0

Residential: 193

Multifamily: 0

Target hazards: 0

Critical infrastructure: 1

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca is most prevalent with some thick pockets of Fuel Model 2 (ponderosa pine with grass and needle-cast understory). Heavy concentration of brush located in Skunk Canyon.

Community Layout

Densely-packed, large single family structures with interspersed open space. Deep pockets of wildland and ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Central Zone staging located at Chautauqua Park on Baseline Road.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in blue polygon.

Defensible Space

Fair along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Access

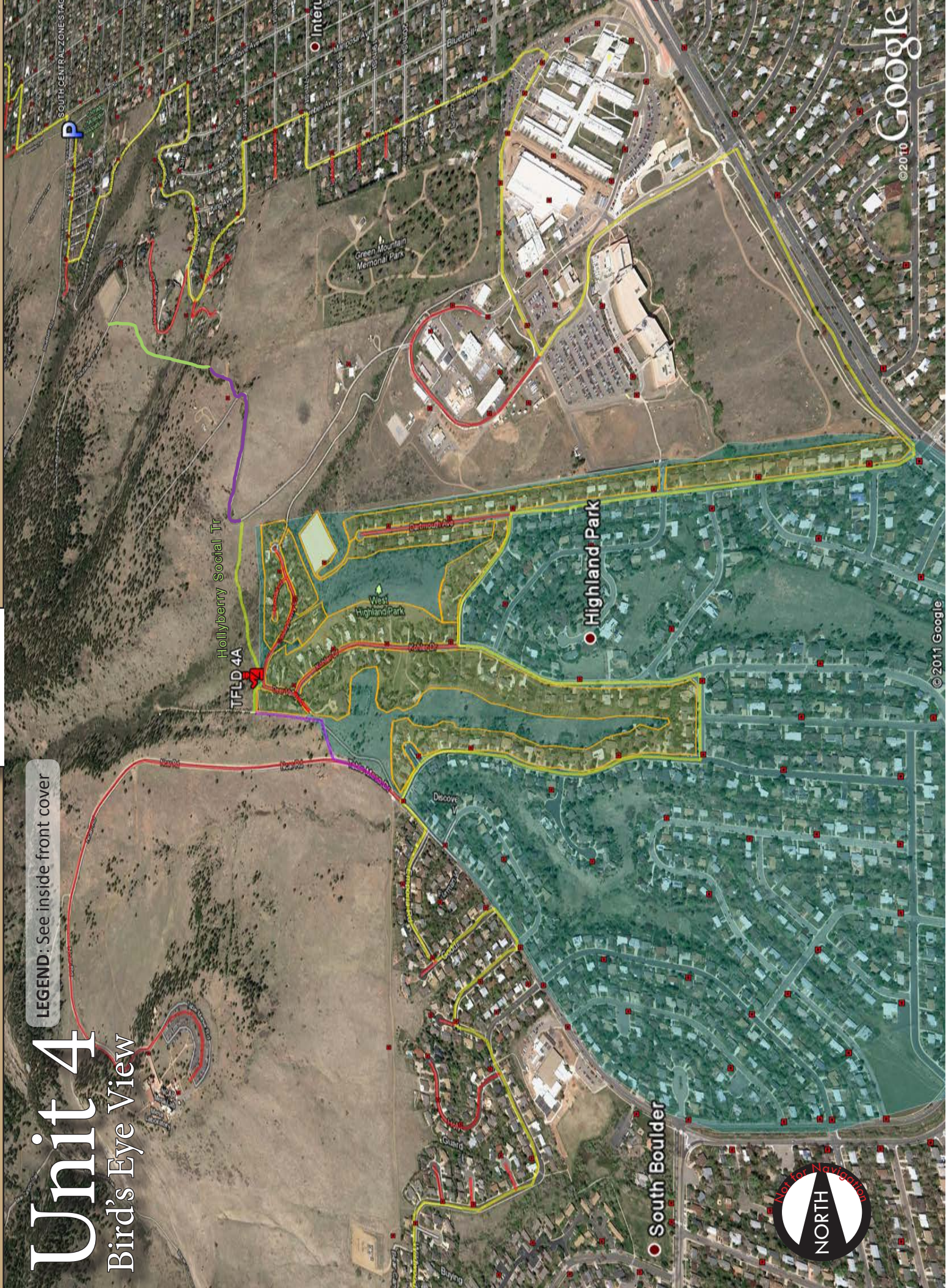
Open space land accessible to 4x4 vehicles in limited areas. Open space

Unit 4

Bird's Eye View

LEGEND : See inside front cover

APPENDIX SOUTH ZONE SOUTH CENTRAL ZONE NORTH CENTRAL ZONE NORTH ZONE INTRODUCTION



social trails provide needed starting point for construction of fire break in Unit 4. Considerable improvement and construction of line will be needed for complete coverage. Plumbing of line locations will be mandatory in most line locations requiring heavy concentration of resources. Spotting may create the need for secondary lines due to current social trail locations.

Fire Probability

Very High along entire planning unit.

Probability of Success

Fair based on access, limited existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve existing trails for easier access by 4x4 wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' out on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations.

Aircraft

Use of heavy concentrations of retardant (5,000+ gallons) in close proximity to homes may be required along majority of planning unit. Cost of retardant could exceed \$50,000. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

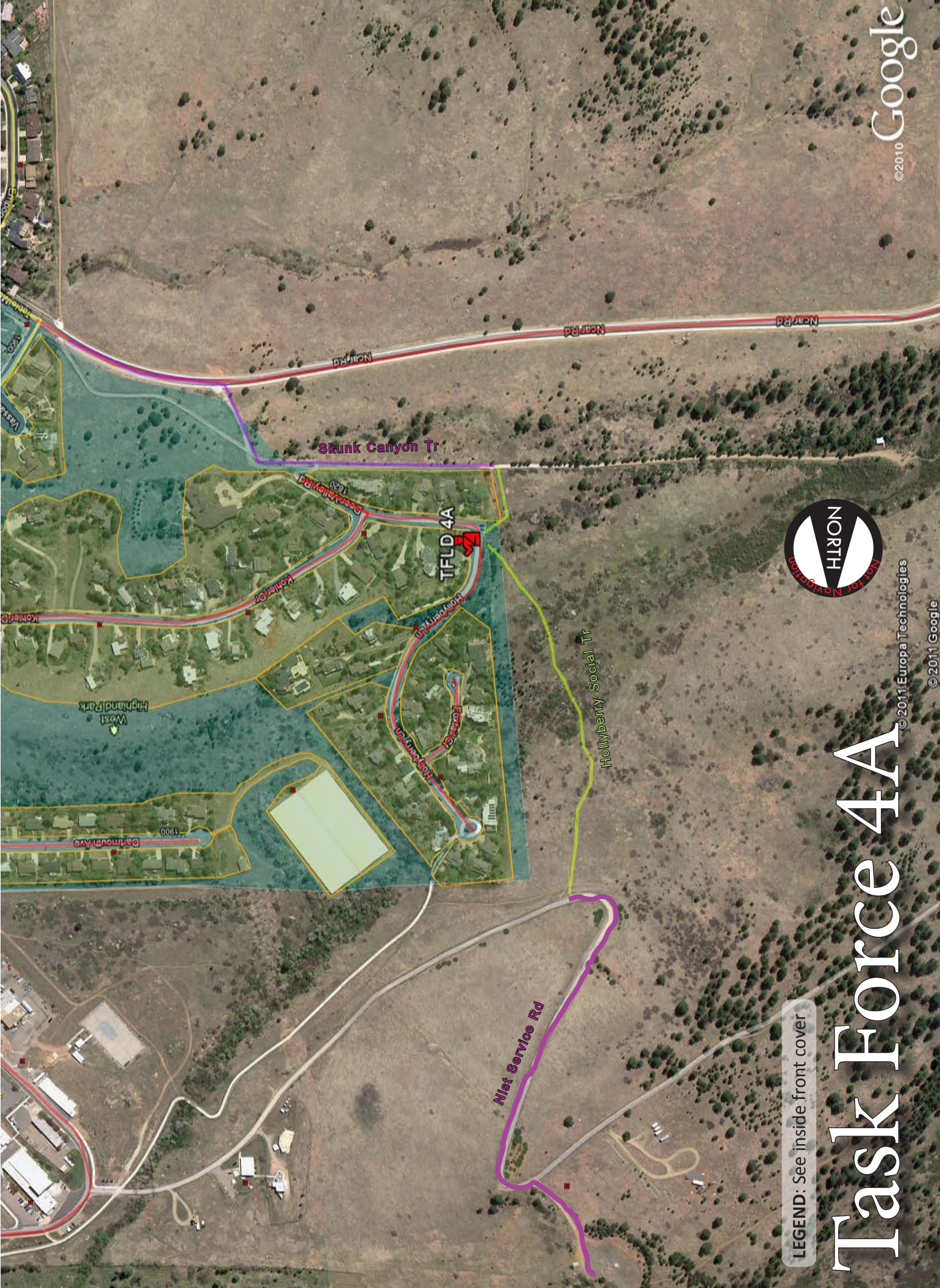
Logistics

7 ENGINES TYPE 1-3
1 ENGINE TYPE 3-6
1 HAND CREW SQUAD

1500' 1.5" HOSE
700' 1" HOSE
7 1.5" GATED WYES WITH 7 1.5" TO 1" REDUCERS
7 1' NOZZLES

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	4A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From: _____ To: _____				
3. Branch <b style="text-align: center;">CITY OF BOULDER			4. Division/Group <b style="text-align: center;">STRUCTURE GROUP			
5. Operations Personnel		NAME		Contact #(s)		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:				Critical wildland resources		
6. Resources Assigned This Period:					"X" indicates 204a attachment with special instructions	
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 4 ALPHA			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
ENG TYP 1-3			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
ENG TYP 1-3			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
ENG TYP 1-3			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
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ENG TYP 1-3			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
ENG TYP 1-3			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
ENG TYP 3-6			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
CREW, SQUAD			DEER VALLEY AND HOLLYBERRY LN		<input type="checkbox"/>	
7. ASSIGNMENTS						
1. HOLD SKUNK CANYON TRAIL FROM NCAR RD TO HOLLYBERRY SOCIAL TRAIL. 2. IMPROVE HOLLYBERRY SOCIAL TRAIL FROM SKUNK CANYON TRAIL TO NIST ACCESS RD 3. PROTECT STRUCTURES ALONG DEER VALLEY RD, HOLLY BERRY RD, FOXTAIL CT.						
8. Special instructions						
1. OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. 2. PLUMBING SKUNK CANYON LINE WILL REQUIRE 1500' 1.5" HOSE, 800' 1" HOSE, 8 1.5" GATED WYES W/ 1" REDUCERS AND 8 1" NOZZLES						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function		Radio: Freq. / System / Channel		Phone		
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



LEGEND: See inside front cover

Task Force 4A



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Table Mesa Drive to Greenbriar Boulevard

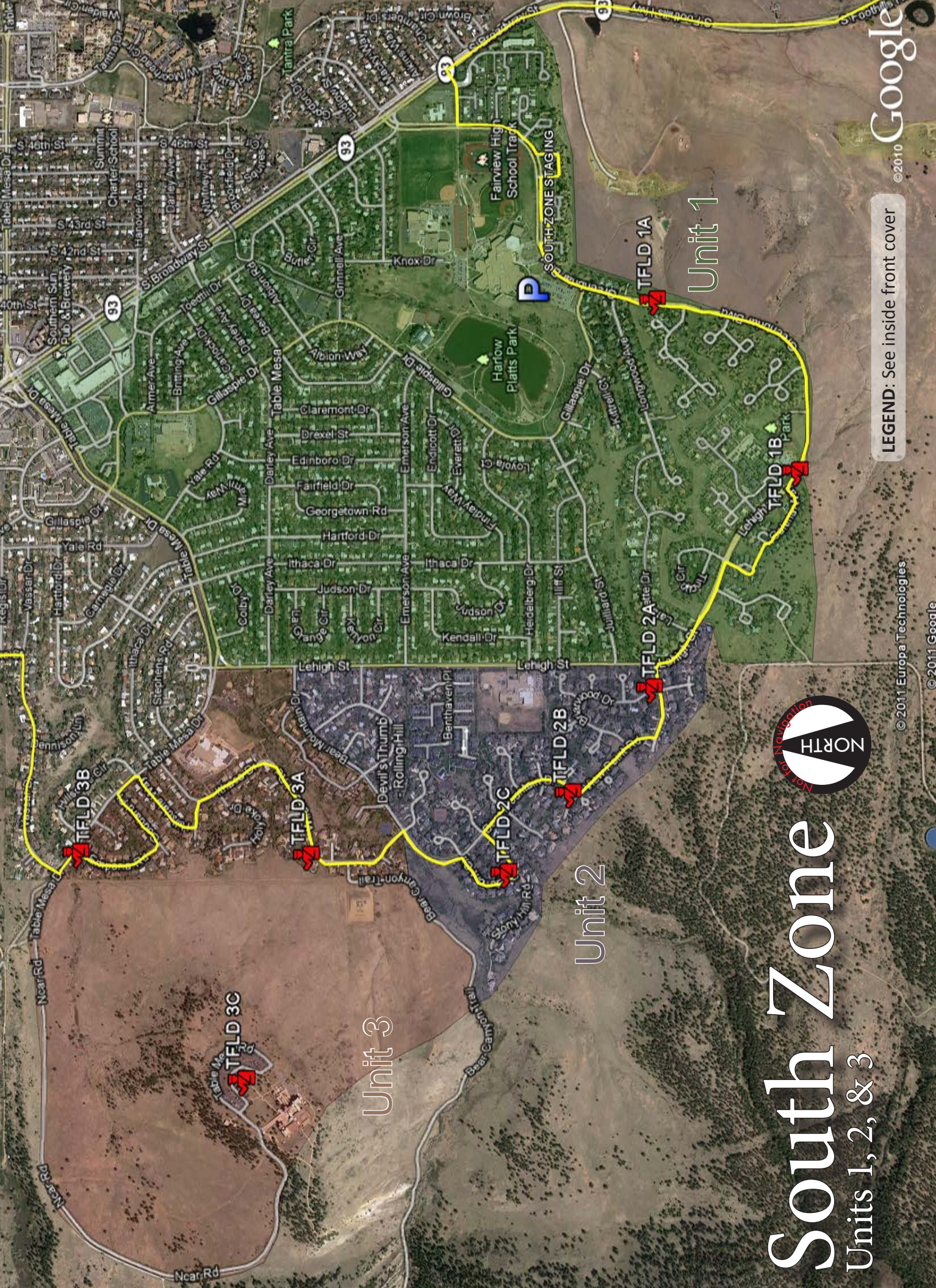
Units

- 1
- 2
- 3





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LEGEND: See inside front cover

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South Zone

Units 1, 2, & 3

Unit 2

Unit 1

Unit 3

TFLD 3B

TFLD 3A

TFLD 2C

TFLD 2B

TFLD 2A

TFLD 1B

TFLD 1A

TFLD 3C

P

SOUTH ZONE STAGING

Fairview High School Track

Fairview High School

Harlow Platts Park

Lehigh Park

Tantra Park

South Zone Resources

Unit 1 Resources List

Personnel

- 2 TASK FORCE LEADERS
- 6 ENGINES TYPE 1-3
- 4 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW

Equipment

- 1000' 1.5" HOSE
- 500 FEET 1" HOSE
- 5 GATED WYES W 1.5" TO 1" REDUCERS
- 5 1" NOZZLES

Unit 2 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 15 ENGINES TYPE 1-3
- 2 ENGINES TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW

Equipment

- 5000 FT 1.5 INCH
- 2500 FT 1 INCH
- 25 GATED WYES (WITH 15 1.5 TO 1 REDUCERS)
- 15 1" NOZZLES

Unit 3 Resources List

Personnel

- 3 TASK FORCE LEADERS
- 13 ENGINES TYPE 1-3
- 4 ENGINE TYPE 3-6
- 1 TYPE 2 OR BETTER HAND CREW SQUAD

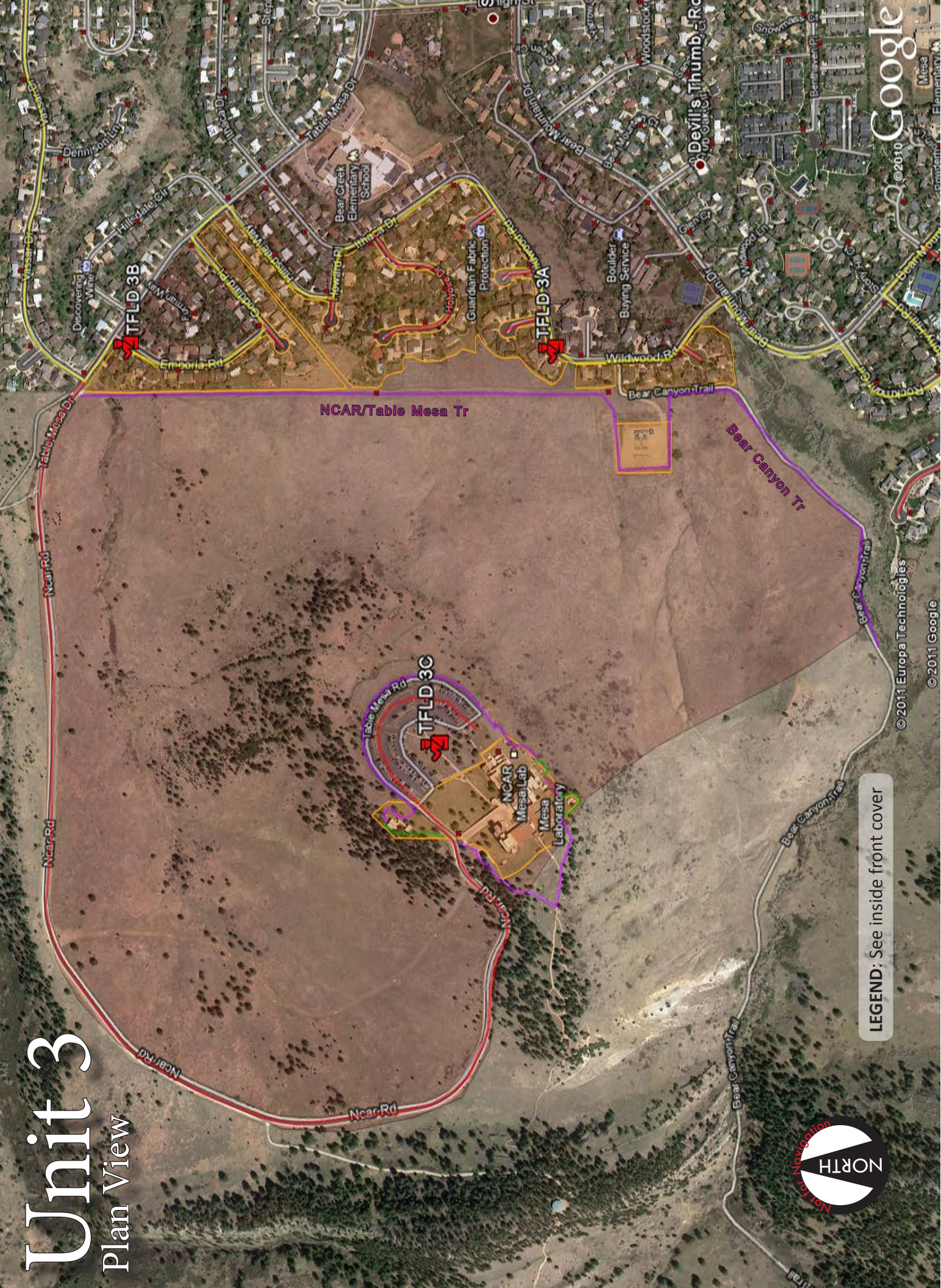
Equipment

None



Unit 3

Plan View



LEGEND: See inside front cover

Unit 3 Description

Planning Unit 3 is located on the far west side of city of Boulder in the South Zone. It is located at the bottom third of Table Mesa between Bear and Skunk Canyons. Planning Unit 3 is composed of a portion of South Boulder subdivision. It contains approximately 1.0 miles of urban interface edge.

Boundary

Bear Mountain Road & Wildwood Road to Drake Street & Regis

Threatened Structures

Commercial: 0

Residential: 108

Multifamily: 0

Target hazards: 1

Critical infrastructure: 1

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca is most prevalent with some thick pockets of Fuel Model 2 (ponderosa pine with grass and needle-cast understory). Heavy concentration of riparian vegetation are located in Bear Canyon.

Community Layout

Densely-packed, large single family structures with interspersed open space. Deep pockets of ornamental fuels between streets with little to no access behind structures. Every effort should be made to exclude fire from these areas.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Zone staging located at Fairview High School on Greenbriar Boulevard.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in light red polygon.

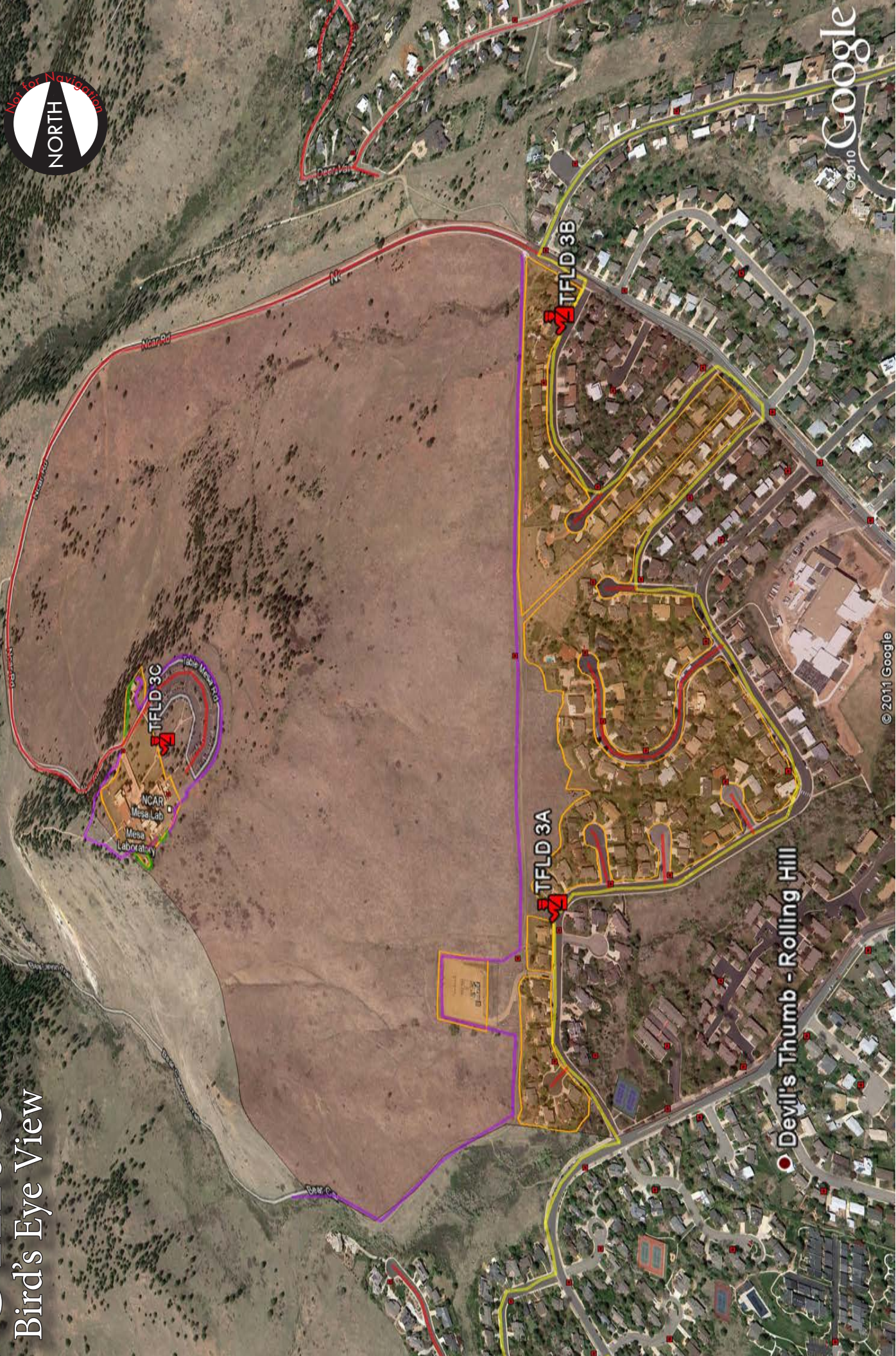
Defensible space

Very good along OSMP/private boundaries. Private residences contain high concentrations of ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Unit 3

Bird's Eye View

LEGEND: See inside front cover



Access

Open space land accessible to 4x4 vehicles in most areas. Open space trails provide needed fire break in Unit 3. Minor construction of line will be needed for complete coverage. Wet line may be a possibility. Spotting may create the need for secondary lines due to current trail locations.

Fire Probability

Very High along entire planning unit.

Probability of Success

Good based on access, existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve existing trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed 3' out on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations.

Aircraft

May be needed for control of fire but are not anticipated to protect homes. Aircraft are limited to flying in daylight hours and in winds of 30 knots or less, a 15 knot (or less) spread between gusts/sustained. Aircraft availability may also be a limitation.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics

3 TASK FORCE LEADERS

13 ENGINES TYPE 1-3

4 ENGINE TYPE 3-6

1 TYPE 2 OR BETTER HAND CREW SQUAD

ASSIGNMENT LIST ICS-204			PAGE 1 OF	PLANNING UNIT 3C
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)		
		From: To:		
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP		
5. Operations Personnel		NAME Contact #(s)		
Operations Section Chief:		Critical wildland resources		
Branch Director:				
Division/Group Supervisor:				
6. Resources Assigned This Period: "X" indicates 204a attachment with special instructions				
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓
TFLD 3 CHARLIE		NCAR		<input type="checkbox"/>
ENG TYP 1-3		NCAR		<input type="checkbox"/>
ENG TYP 1-3		NCAR		<input type="checkbox"/>
ENG TYP 3-6		NCAR		<input type="checkbox"/>
HANDCREW, SQUAD		NCAR		<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
7. ASSIGNMENTS				
1. PROTECT STRUCTURES AT NCAR FACILITY				
8. Special instructions				
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.				
9. Communications (radio and/or phone contact numbers needed for this assignment)				
Name / Function	Radio: Freq. / System / Channel	Phone		
Command				
Tactical				
Air to Ground				
Emergency Commo				
Medical				
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time		
Assignment List		ICS 204 -BFD REVISED June 2011		



Task Force 3C

LEGEND: See inside front cover



ASSIGNMENT LIST ICS-204			PAGE 1 OF	PLANNING UNIT 3B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:		
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP		
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:		NAME	Contact #(s)	Critical wildland resources
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓
TFLD 3 BRAVO			TABLE MESA RD AND EMPORIA RD	<input type="checkbox"/>
ENG TYP 1-3			TABLE MESA RD AND EMPORIA RD	<input type="checkbox"/>
ENG TYP 1-3			TABLE MESA RD AND EMPORIA RD	<input type="checkbox"/>
ENG TYP 1-3			TABLE MESA RD AND EMPORIA RD	<input type="checkbox"/>
ENG TYP 1-3			TABLE MESA RD AND EMPORIA RD	<input type="checkbox"/>
ENG TYP 3-6			BEAR CANYON TRAIL AND WILDWOOD RD	<input type="checkbox"/>
CREW, SQUAD			SHARED WITH TF 3 ALPHA	<input type="checkbox"/>
				<input type="checkbox"/>
7. ASSIGNMENTS				
<p>1. HOLD LINE ALONG BEAR CANYON TRAIL FROM NEAR 1900 STONY HILL ROAD NORTH TO TABLE MEASA/NCAR ROAD WITH WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL)</p> <p>2. COORDINATE WITH TFLD 2C AND 3B FOR ANY FIRING OPERATIONS</p> <p>3. PROTECT STRUCTURES ON HILLSDALE WAY, GODDARD PL, EMPORIA RD AND TABLE MESA DR</p> <p>4. IF BEAR CANYON LINE IS LOST CRITICAL THAT LINE HOLDS BETWEEN GODDARD PL ,HOWARD PL AND HOLYOKE DR</p>				
8. Special instructions				
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.				
9. Communications (radio and/or phone contact numbers needed for this assignment)				
Name / Function	Radio: Freq. / System / Channel	Phone		
Command				
Tactical				
Air to Ground				
Emergency Commo				
Medical				
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time		
Assignment List		ICS 204 -BFD REVISED June 2011		

TBC To be constructed



NCAR/Tabler Mesa Tr

Task Force 3B



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ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	3A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:		To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 3 ALPHA			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
ENG TYP 1-3			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
ENG TYP 1-3			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
ENG TYP 1-3			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
ENG TYP 1-3			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
ENG TYP 1-3			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
ENG TYP 1-3			WILDWOOD RD AND HOLYOKE DR		<input type="checkbox"/>	
CREW, SQUAD			BEAR CANYON TRAIL AND WILDWOOD RD		<input type="checkbox"/>	
ENG TYP 3-6			BEAR CANYON TRAIL AND WILDWOOD RD		<input type="checkbox"/>	
ENG TYP 3-6			BEAR CANYON TRAIL AND WILDWOOD RD		<input type="checkbox"/>	
7. ASSIGNMENTS						
1. HOLD LINE ALONG BEAR CANYON TRAIL FROM NEAR 1900 STONY HILL ROAD NORTH TO TABLE MEASA/NCAR ROAD WITH WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 2. COORDINATE WITH TFLD 2C AND 3B FOR ANY FIRING OPERATIONS 3. PROTECT STRUCTURES ON STONY HILL RD ,ROCKY POINT CIR AND HOWARD PL						
8. Special instructions						
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			



Task Force 3A

LEGEND: See inside front cover



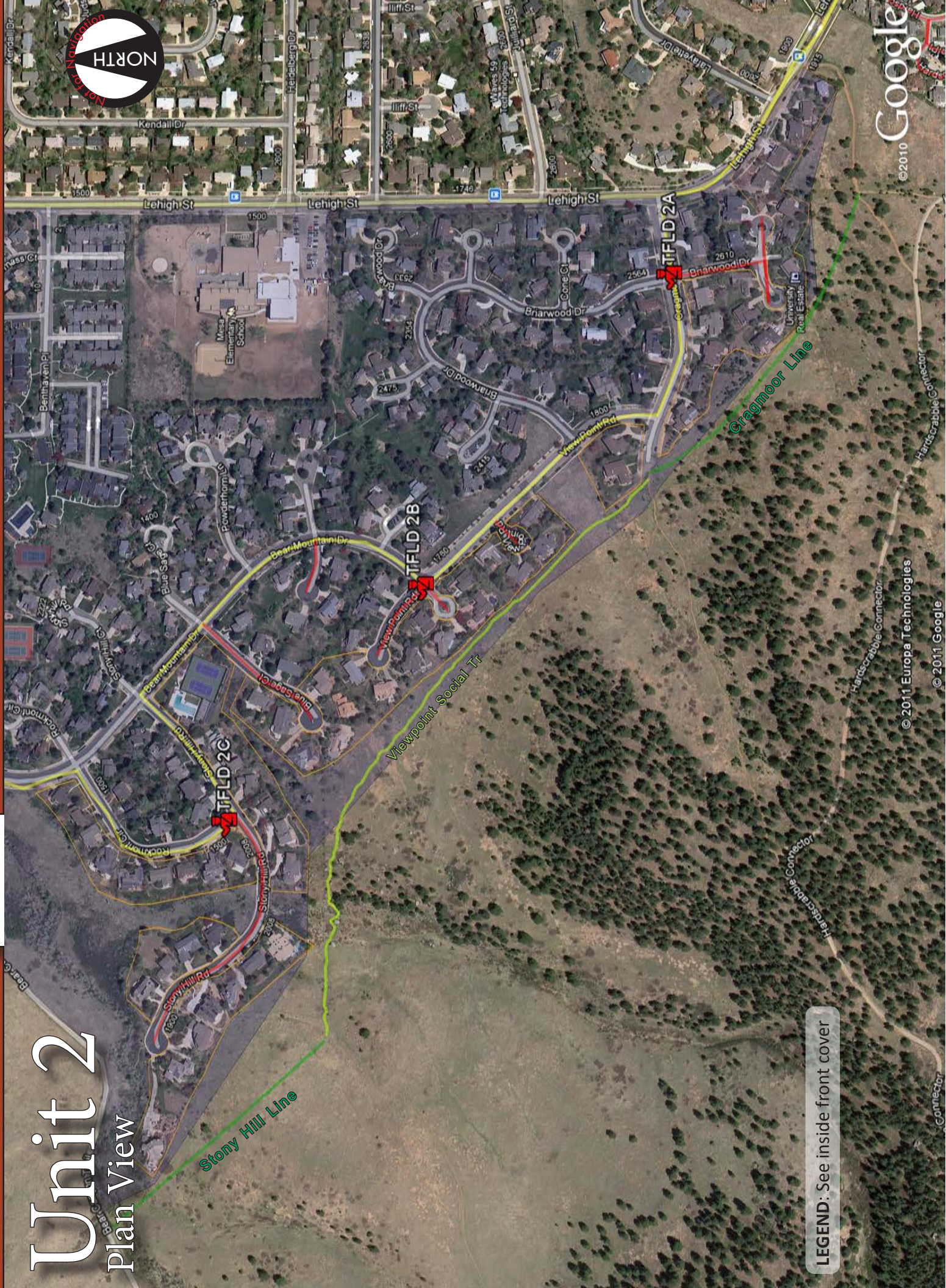
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Unit 2

Plan View



LEGEND: See inside front cover

Unit 2 Description

Planning Unit 2 is located on the far southwestern end of the city of Boulder in the South Zone. It is located on top of Shanahan Hill, a sloping mesa which slopes downward to the south into the South Boulder Creek Drainage, and north into Fern Canyon and Bear Canyon. It is composed of a portion of the Devil's Thumb subdivision. It contains approximately .8 miles of urban interface edge.

Boundary

1915 Lehigh Street to Bear Mountain Drive & Wildwood Road

Threatened Structures

Commercial: 1

Residential: 61

Multifamily: 0

Target hazards: 0

Critical infrastructure: 1

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca is most prevalent with some thick pockets of Fuel Model 2 (ponderosa pine with grass and needle-cast understory). Heavy concentrations of combustible brush species are located in Fern Canyon. Heavy concentration of riparian vegetation is located in Bear Canyon.

Community Layout

Densely-packed, large single family structures with interspersed open space.

Construction

Typical wood framed homes with a mixture of primarily noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Zone Staging located at Fairview High School on Greenbriar Boulevard.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in light blue polygon.

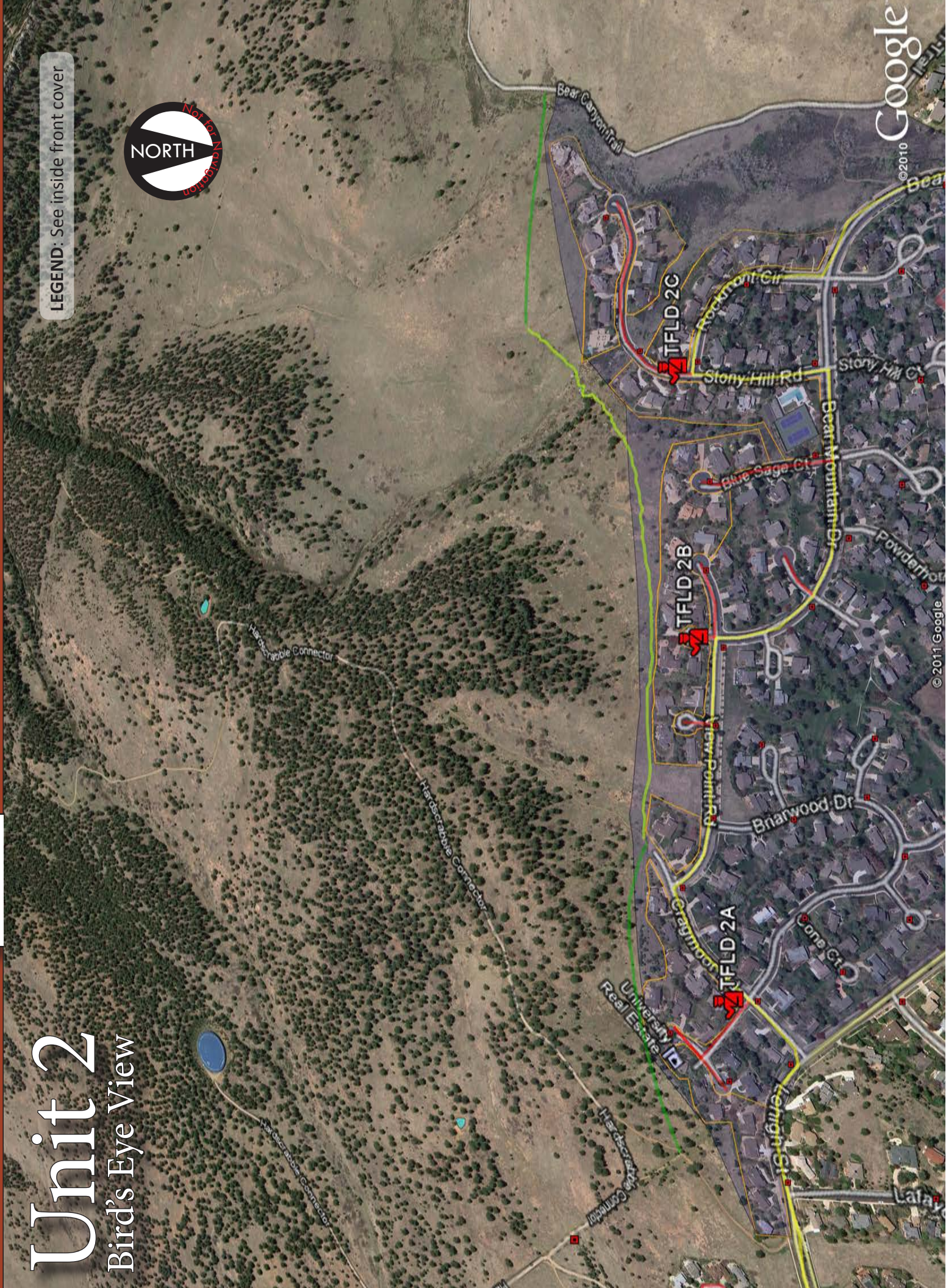
Defensible Space

Fair along OSMP/private boundaries. Private residences contain high concentrations of combustible ornamental vegetation and combustible fences making access from front of structures difficult. Some structure have almost a complete wall of highly combustible juniper. Little can be done to protect these homes from wildfire. Close proximity of homes will require significant

Unit 2

Bird's Eye View

LEGEND: See inside front cover



resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Access

Rear of structures is accessible to 4x4 vehicles in some areas. Social trails provide starting point for 40% of needed fire breaks in Unit 2. Major construction of line will be needed for complete coverage. Wet line may be a possibility with mowing and heavy thinning of fuels. Plumbing of line locations will be mandatory in most line locations, requiring heavy concentration of resources. Spotting may create the need for secondary lines due to current social trail locations.

Fire Probability

Extreme along entire planning unit.

Probability of Success

Poor based on limited access, lack of existing defensible features and homeowner selection of ornamental vegetation. Residences in close proximity to urban interface edge are also at risk from spotting due to popularity of highly combustible ornamentals.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve existing social trails for easier access by 4x4-wheeled vehicles where appropriate. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed to 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations.

Aircraft

Use of heavy concentrations of retardant (10,000+ gallons) in close proximity to homes may be required along entire planning unit. Cost of retardant could exceed \$100,000 and is limited by winds of 30 knots or 15 knot gust/sustained spread, daylight hours, and aircraft availability.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

Logistics:

3 TASK FORCE LEADERS
15 ENGINES TYPE 1-3
2 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW

5000 FT 1.5 INCH
2500 FT 1 INCH
25 GATED WYES (WITH 15 1.5 TO 1 REDUCERS)
15 1" NOZZLES

ASSIGNMENT LIST ICS-204		PAGE 1 OF 1	PLANNING UNIT 2C
1. Incident Name: PREPLAN		2. Operational Period (Date / Time) From: To:	
3. Branch CITY OF BOULDER		4. Division/Group STRUCTURE GROUP	
5. Operations Personnel Operations Section Chief: Branch Director: Division/Group Supervisor:	NAME	Contact #(s)	Critical wildland resources
6. Resources Assigned This Period:			*X* indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks
TFLD 2 CHARLIE			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
ENG TYP 1-3			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
ENG TYP 1-3			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
ENG TYP 1-3			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
ENG TYP 1-3			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
ENG TYP 1-3			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
ENG TYP 3-6			STONY HILL RD AND ROCKY POINT CIR <input type="checkbox"/>
			<input type="checkbox"/>
CREW, TYPE 2 OR BETTER			SHARED WITH TF 2 ALPHA <input type="checkbox"/>
			<input type="checkbox"/>
7. ASSIGNMENTS			
1. CONSTRUCT LINE FROM STONY HILL RD DRAINAGE NORTH TO BEAR CANYON TRAIL (.2 MILES) WITH HANDLINE/HOSELAY/WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 2. COORDINATE WITH TFLD 2A & 2C ON ANY FIRING OPERATIONS 3. PROTECT STRUCTURES ON STONY HILL RD AND ROCKY POINT CIR			
8. Special instructions			
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. COORDINATE WITH 2A AND 2B ON USE OF HAND CREW TO COMPLETE LINE IN PLANNING UNIT 2			
9. Communications (radio and/or phone contact numbers needed for this assignment)			
Name / Function	Radio: Freq. / System / Channel	Phone	
Command			
Tactical			
Air to Ground			
Emergency Commo			
Medical			
10. Prepared By: (Resource Unit)		11. Approved By: (Planning Section Chief) Date / Time	
Assignment List		ICS 204 -BFD REVISED June 2011	

LEGEND: See inside front cover



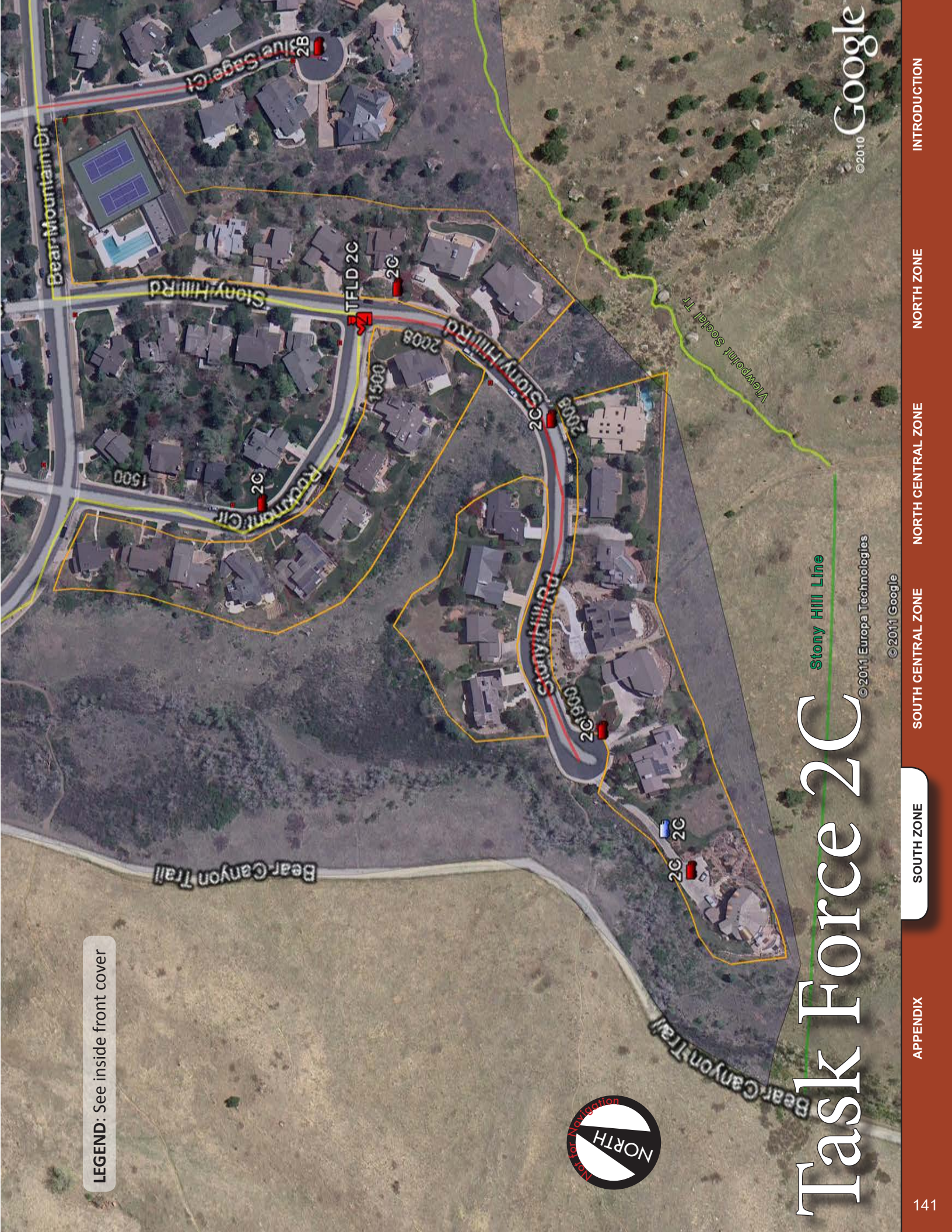
Task Force 2C

Stony Hill Line

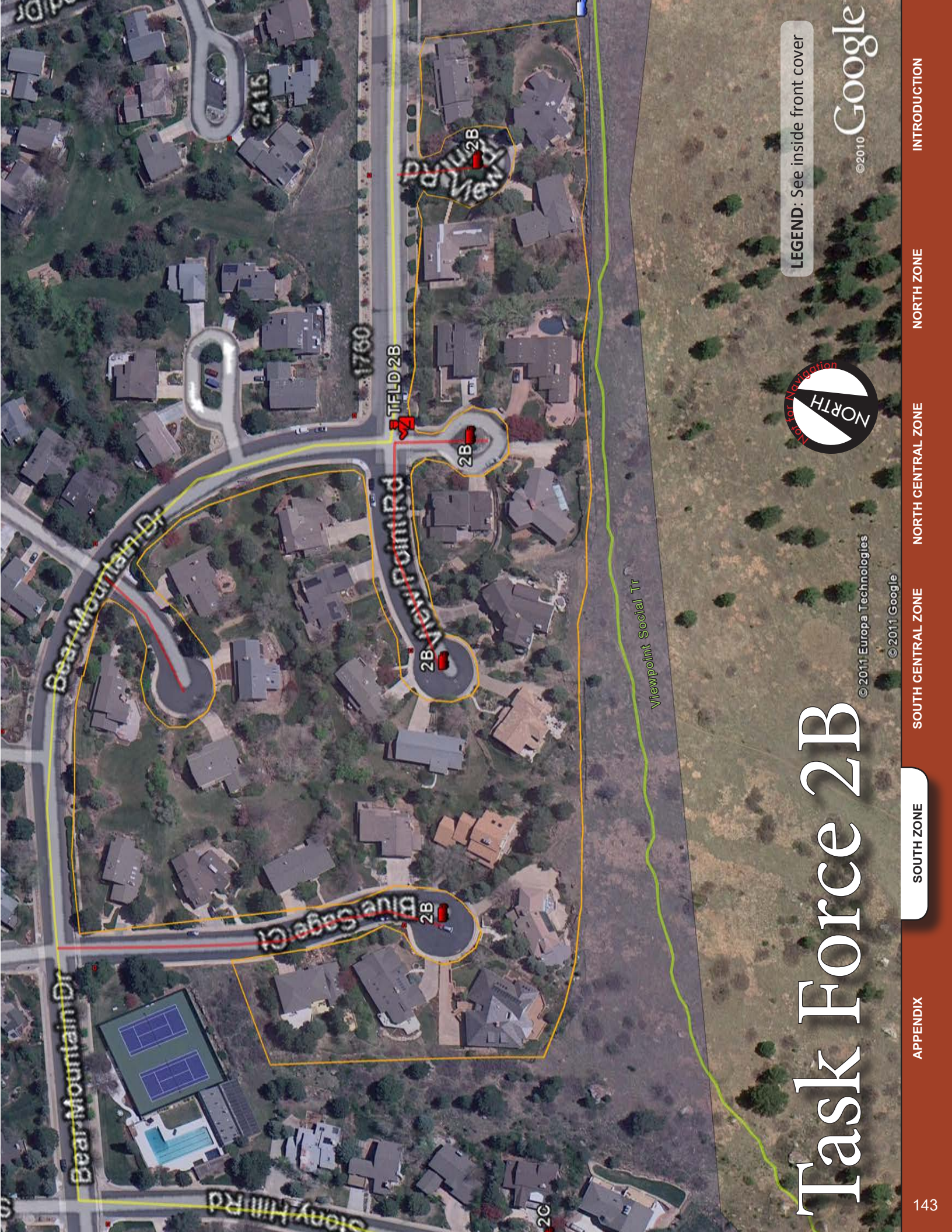
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ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	2B
1. Incident Name: PREPLAN			2. Operational Period (Date / Time)			
			From:	To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:						"X" indicates 204a attachment with special instructions
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks			↓
TFLD 2 BRAVO			VIEW POINT RD AND BEAR MOUNTAIN DR			<input type="checkbox"/>
ENG TYP 1-3			VIEW POINT RD AND BEAR MOUNTAIN DR			<input type="checkbox"/>
ENG TYP 1-3			VIEW POINT RD AND BEAR MOUNTAIN DR			<input type="checkbox"/>
ENG TYP 1-3			VIEW POINT RD AND BEAR MOUNTAIN DR			<input type="checkbox"/>
ENG TYP 1-3			VIEW POINT RD AND BEAR MOUNTAIN DR			<input type="checkbox"/>
ENG TYP 3-6			VIEW POINT RD AND BEAR MOUNTAIN DR			<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
CREW, TYPE 2 OR BETTER			SHARED WITH TF 2 ALPHA			<input type="checkbox"/>
						<input type="checkbox"/>
7. ASSIGNMENTS						
1. IMPROVE SOCIAL TRAIL FROM END OF CRAGMOOR N TO STONY HILL DRAINAGE (.4 MILES) AND THEN CONSTRUCT LINE TO BEAR CANYON (.2 MILES) WITH HANDLINE/HOSELAY/(WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 2. COORDINATE WITH TFLD 2A & 2CON ANY FIRING OPERATIONS 3. PROTECT STRUCTURES ON VIEW POINT RD						
8. Special instructions						
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. COORDINATE WITH 2A AND 2C ON USE OF HAND CREW TO COMPLETE LINE IN PLANNING UNIT 2						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function		Radio: Freq. / System / Channel		Phone		
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			



LEGEND: See inside front cover



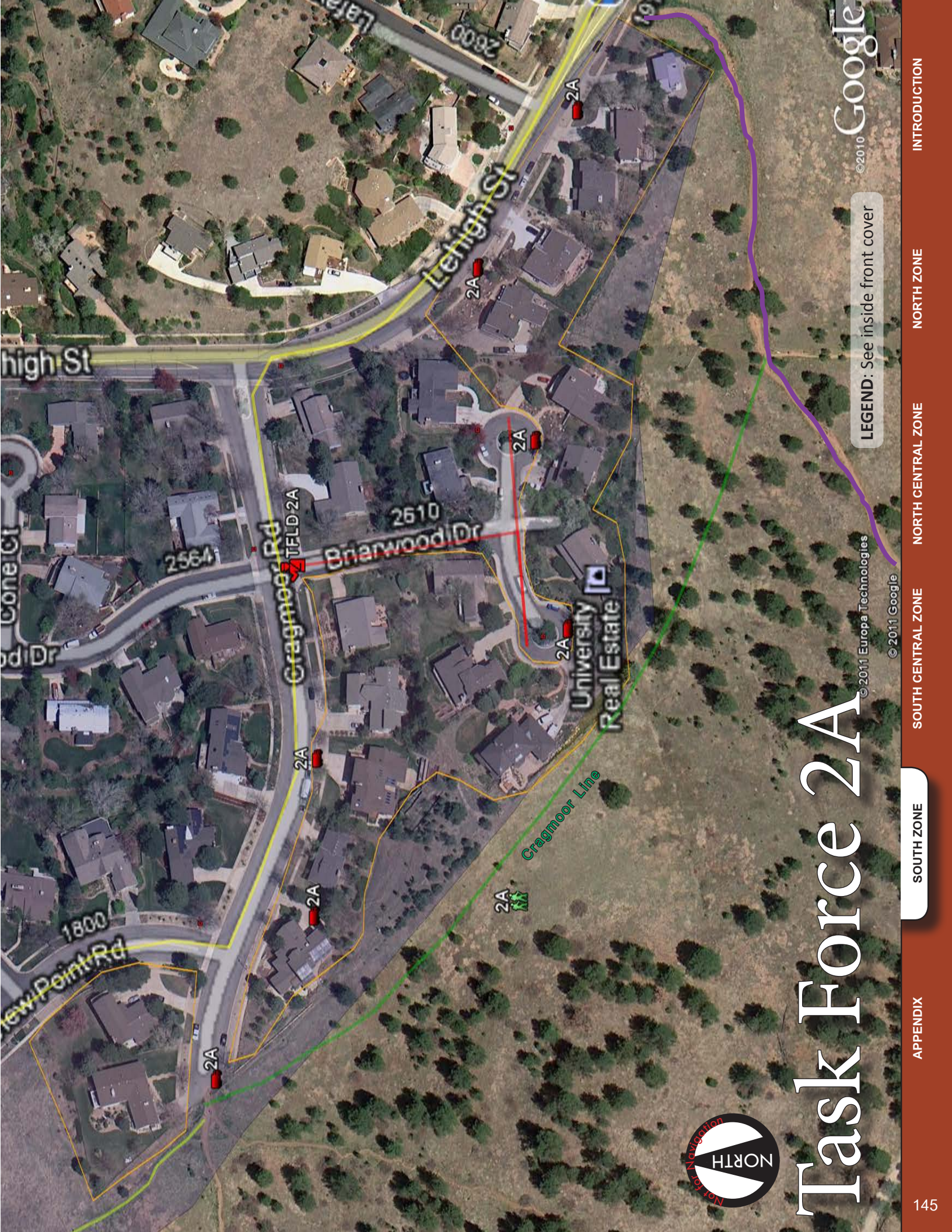
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ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	2A
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From:		To:		
3. Branch			4. Division/Group			
CITY OF BOULDER			STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)			
Operations Section Chief:				Critical wildland resources		
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks		↓	
TFLD 2 ALPHA			CRAGMOOR RD AND BRIARWOOD DR		<input type="checkbox"/>	
ENG TYP 1-3			CRAGMOOR RD AND BRIARWOOD DR		<input type="checkbox"/>	
ENG TYP 1-3			CRAGMOOR RD AND BRIARWOOD DR		<input type="checkbox"/>	
ENG TYP 1-3			CRAGMOOR RD AND BRIARWOOD DR		<input type="checkbox"/>	
ENG TYP 1-3			CRAGMOOR RD AND BRIARWOOD DR		<input type="checkbox"/>	
ENG TYP 3-6			HARD SCRABBLE CONNECTOR & SHANAHAN- SOUTH FORK		<input type="checkbox"/>	
ENG TYP 3-6			HARD SCRABBLE CONNECTOR & SHANAHAN- SOUTH FORK		<input type="checkbox"/>	
HANDCREW, TYP 2 IA or Better			HARD SCRABBLE CONNECTOR & SHANAHAN- SOUTH FORK		<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
7. ASSIGNMENTS						
<p>1. CONSTRUCT HANDLINE FROM LEIGH CONNECTOR -NORTH TO CRAGMOOR RD HOSELAY/(WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL).</p> <p>2. COORDINATE WITH TFLD 1A &2A ON ANY FIRING OPERATIONS.</p> <p>3. PLUMBING BRIARWOOD LINE WILL REQUIRE 1500' 1.5" HOSE, 800' 1" HOSE, 8 1.5"GATED WYES W/ 1" REDUCERS AND 8 1" NOZZLES</p>						
8. Special instructions						
<p>1.OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION.</p> <p>2.COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY OR ADJACENT RESOURCES TO PROTECT FARM AT 877 SOUTH BOULDER RD.</p> <p>3.COORDINATE WITH 2B AND 2C ON USE OF HAND CREW TO COMPLETE LINE IN PLANNING UNIT 2</p>						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			



Task Force 2A

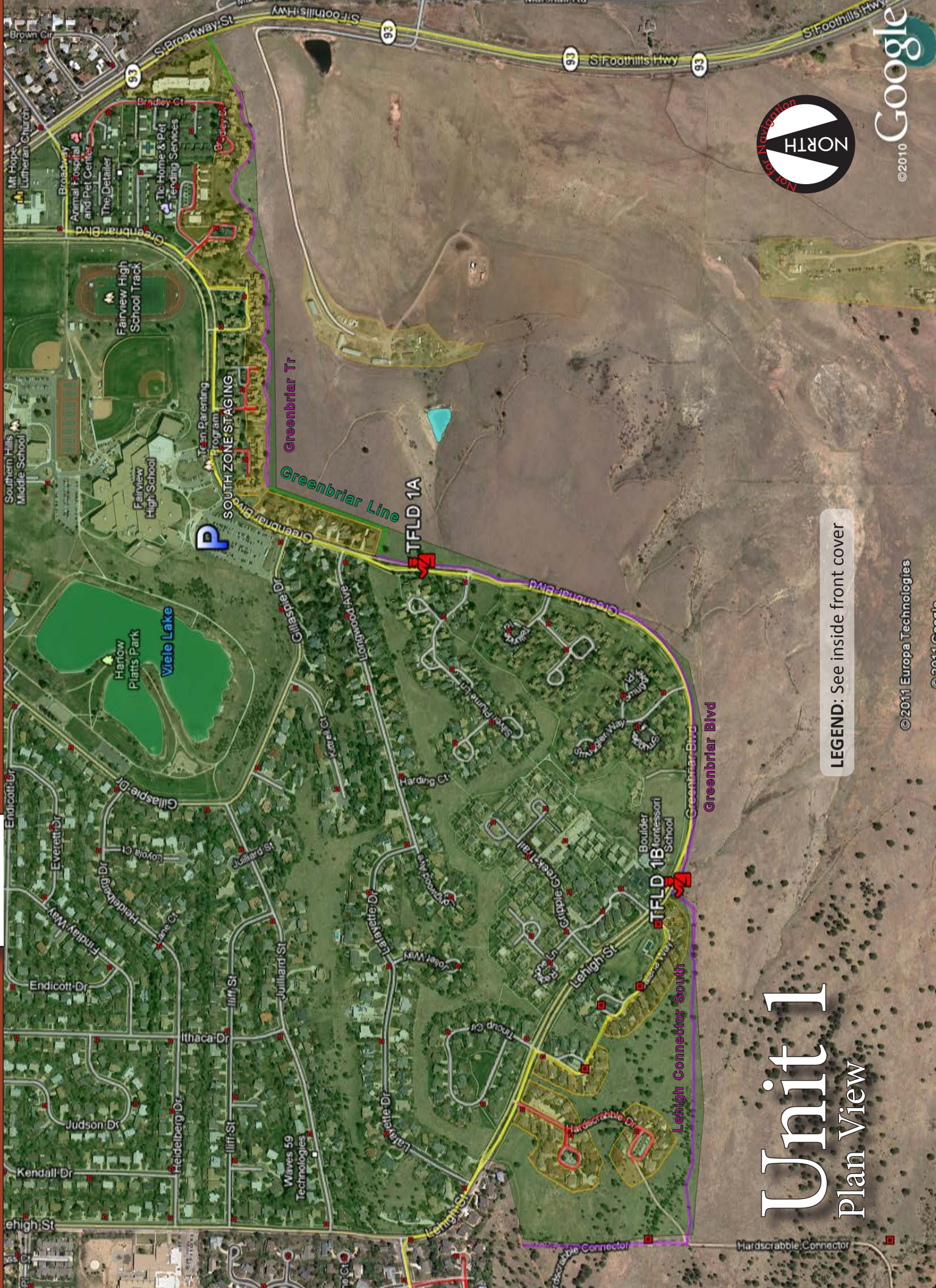
LEGEND: See inside front cover

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Unit 1 Description

Planning Unit 1 is located on the far south end of city of Boulder in the South Zone. It is located on top of Shanahan Hill, a sloping mesa which slopes downward to the south into the South Boulder Creek Drainage. It is composed of portions of the Shanahan Ridge and Majestic Heights subdivisions. It has 1.7 miles of urban interface edge.

Unit Boundary

Broadway to 1915 Lehigh Street

Threatened Structures

Commercial: 0

Residential: 58

Multifamily: 21

Target hazards: 0

Critical infrastructure: 0

Fuels

Fuel Model 1 (short grasses), scattered sage, and yucca is most prevalent with some pockets of thinned Fuel Model 2 (ponderosa with grass and needle-cast understory).

Community Layout

Densely-packed structures with interspersed open space.

Construction

Typical wood framed homes with a mixture of noncombustible roofing and remnant wood shake shingles (which should be removed by 2013).

Level 2 Staging

South Zone Staging located at Fairview High School on Greenbriar Boulevard.

Evacuation

Initial mandatory evacuations are structures highlighted in orange polygons, volunteer evacuations located in light green polygon.

Defensible Space

Good along OSMP/private boundaries. Private residences contain high concentrations of combustible ornamental vegetation and combustible fences making access from front of structures difficult. Close proximity of homes will require significant resources to control exposures if structures are involved. Risk of urban conflagration is high during wind events, which are common in Boulder.

Access

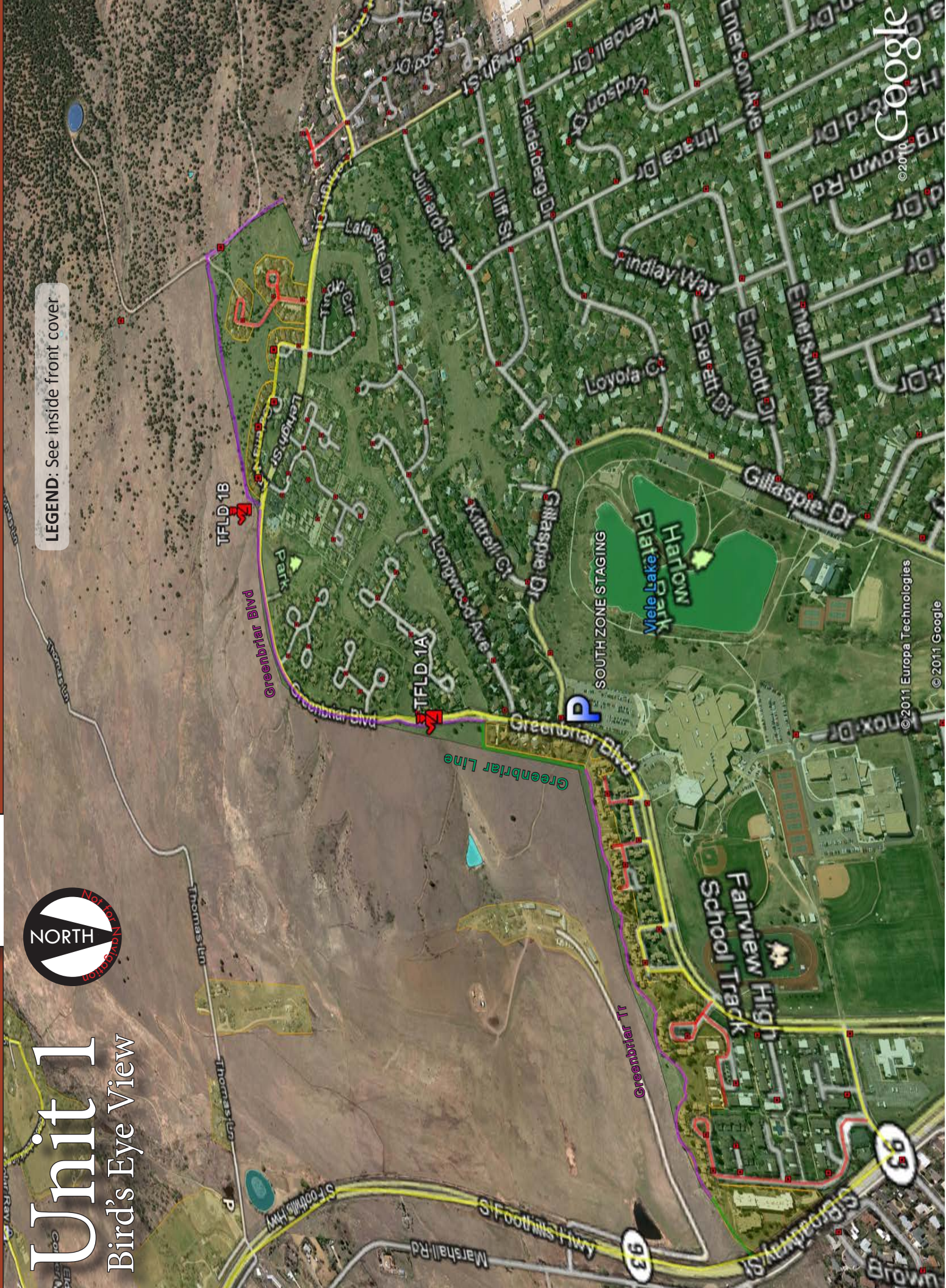
Rear of structures is accessible to 4x4 vehicles in most areas. Trails and paved paths provide needed fire break for majority of Unit 1. Some construction of line will be needed for complete coverage. Wet line may be a possibility with

Unit 1

Bird's Eye View



LEGEND: See inside front cover



mowing of fuels. Spotting may create the need for secondary lines due to current trail locations.

Fire Probability

Moderate on the east side and Very High on the west side of Planning Unit 1.

Probability of Success

Very good based on access and existing defensible features.

Recommendations

Construct OSMP boundary fire trails in close proximity to structures. Improve existing trails for easier access by 4x4-wheeled vehicles. Ensure trails remain vegetation-free. Keep trails less than 4' wide and regularly mowed to 3' on either side. Maintain thinned and limbed timber stands within 500' of communities and along primary line locations.

Aircraft

No use of retardant is anticipated to protect structures due to existing defensible features and access. Aircraft may be needed to control fire. Use of aircraft is limited by winds of 30 knots, 15-knot gust/sustained spread, daylight hours, and aircraft availability.

Water Sources

The city of Boulder has an extensive water supply system. Most areas are covered by hydrants no more than 500 feet apart. No dwelling is more than 250 feet from a hydrant.

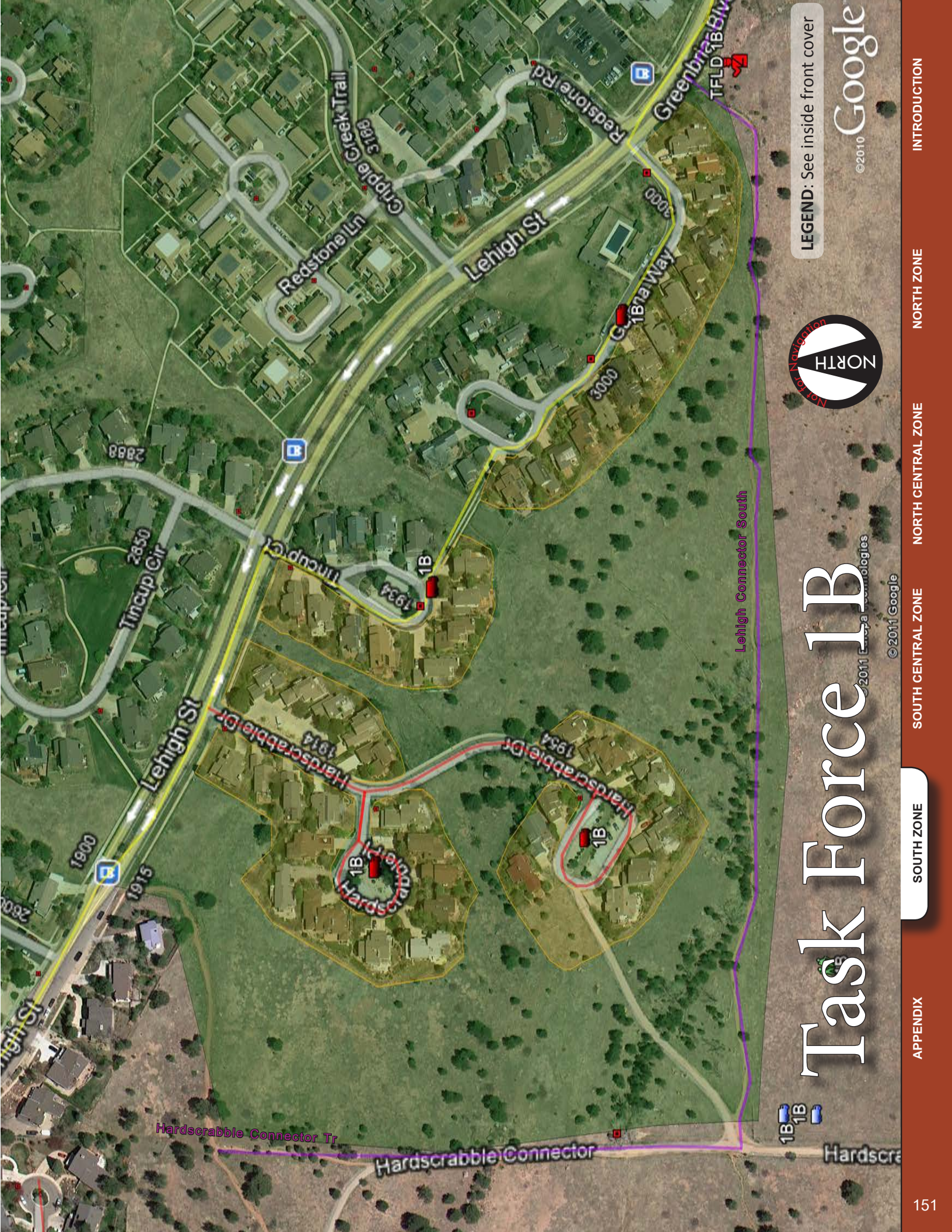
Logistics

2 TASK FORCE LEADERS
6 ENGINES TYPE 1-3
4 ENGINES TYPE 3-6
1 TYPE 2 OR BETTER HAND CREW

1000' 1.5"
500 feet 1"
5 GATED WYES W 1.5" TO 1" REDUCERS
5 1" NOZZLES

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	1B
1. Incident Name: PREPLAN		2. Operational Period (Date / Time)				
		From: To:				
3. Branch			4. Division/Group			
CITY OF BOULDER			STRUCTURE GROUP			
5. Operations Personnel		NAME		Contact #(s)		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:				Critical wildland resources		
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks			
TFLD 1 BRAVO			LEHIGH & GALENA WAY		<input type="checkbox"/>	
ENG TYP 1-3			LEHIGH & GALENA WAY (HARDSCRABBLE PL)		<input type="checkbox"/>	
ENG TYP 1-3			LEHIGH & GALENA WAY (HARDSCRABBLE DR)		<input type="checkbox"/>	
ENG TYP 1-3			LEHIGH & GALENA WAY (TINCUP CT)		<input type="checkbox"/>	
ENG TYP 1-3			LEHIGH & GALENA WAY (GALENA WAY)		<input type="checkbox"/>	
ENG TYP 3-6			HARD SCRABBLE CONNECTOR & SHANAHAN- SOUTH FORK		<input type="checkbox"/>	
ENG TYP 3-6			HARD SCRABBLE CONNECTOR & SHANAHAN- SOUTH FORK		<input type="checkbox"/>	
CREW, SQUAD			HARD SCRABBLE CONNECTOR & SHANAHAN- SOUTH FORK		<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
7. ASSIGNMENTS						
1. PROTECT REAR OF STRUCTURES FROM GALENA WAY USING LEHIGH CONNECTOR -SOUTH TRAIL TO LEHIGH CONNECTOR-NORTH WITH HOSELAY/(WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 2. COORDINATE WITH TFLD 1A &2A ON ANY FIRING OPERATIONS 3 PROTECT STRUCTURES ON GALENA WY , TINCUP CT, HARDSCRABBLE DR, AND HARD SCRABBLE PL						
8. Special instructions						
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY OR ADJACENT RESOURCES TO PROTECT FARM AT 877 SOUTH FOOTHILLS HWY.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief) Date / Time			
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



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APPENDIX

SOUTH ZONE

SOUTH CENTRAL ZONE

NORTH CENTRAL ZONE

NORTH ZONE

INTRODUCTION

ASSIGNMENT LIST ICS-204			PAGE	1 OF	PLANNING UNIT	1A
1. Incident Name: PREPLAN			2. Operational Period (Date / Time)			
			From:	To:		
3. Branch CITY OF BOULDER			4. Division/Group STRUCTURE GROUP			
5. Operations Personnel		NAME	Contact #(s)	Critical wildland resources		
Operations Section Chief:						
Branch Director:						
Division/Group Supervisor:						
6. Resources Assigned This Period:				"X" indicates 204a attachment with special instructions		
Strike Team / Task Force/ Resource Identifier	Leader + # crew	Contact Info #	Reporting Info/Notes/Remarks	↓		
TFLD 1 ALPHA			3815 GREENBRIAR BLVD	<input type="checkbox"/>		
ENG TYP 1-3			3815 GREENBRIAR BLVD	<input type="checkbox"/>		
ENG TYP 1-3			3815 GREENBRIAR BLVD	<input type="checkbox"/>		
ENG TYP 3-6			3815 GREENBRIAR BLVD	<input type="checkbox"/>		
ENG TYP 3-6			3815 GREENBRIAR BLVD	<input type="checkbox"/>		
CREW, SQUAD			3815 GREENBRIAR BLVD	<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
				<input type="checkbox"/>		
7. ASSIGNMENTS						
1. PROTECT REAR OF STRUCTURES FROM 3815-2039 GREENBRIAR BLVD WITH HANDLINE /HOSELAY/(WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 2. PROTECT REAR OF STRUCTURES USING PAVED PATH FROM 2039 GREENBRIAR BLVD TO 1589 BRADLEY CT WITH HOSELAY/(WETLINE/(FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 3. CONSTRUCT HANDLINE /HOSELAY/(WETLINE/ (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) FROM 1589 EAST TO TIE IN WITH BROADWAY 4. PATROL FROM 3815 GREENBRIAR BLVD TO GALENA WAY KEEP FIRE SOUTH OF GREEN BRIAR BLVD (FIRING WITH OPERATIONS APPROVAL AND QUALIFIED PERSONNEL) 5. COORDINATE WITH TFLD 1B ON ANY FIRING OPERATIONS						
8. Special instructions						
OBTAIN OPERATIONS SECTION CHIEF APPROVAL BEFORE ANY FIRING OPERATION. COORDINATE WITH ROCKY MOUNTAIN FIRE AUTHORITY OR ADJACENT RESOURCES TO PROTECT FARM AT 877 SOUTH FOOTHILLS HWY.						
9. Communications (radio and/or phone contact numbers needed for this assignment)						
Name / Function	Radio: Freq. / System / Channel	Phone				
Command						
Tactical						
Air to Ground						
Emergency Commo						
Medical						
10. Prepared By: (Resource Unit)			11. Approved By: (Planning Section Chief)		Date / Time	
Assignment List			ICS 204 -BFD REVISED June 2011			

TBC To be constructed



LEGEND: See inside front cover



Task Force 1A

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Evacuation Plan
Phone Lists
Aerial Hazards
Organizational Chart
BFD Wildland Realignment
Radio Frequencies
Response Districts
OSMP Treated Areas
Resource Ordering
Financial Impacts

*Appendix published as needed



APPENDIX

(See Separate Document)

