The Original Green: Designing Efficiency Into Our Communities

Energy Efficiency Working Group

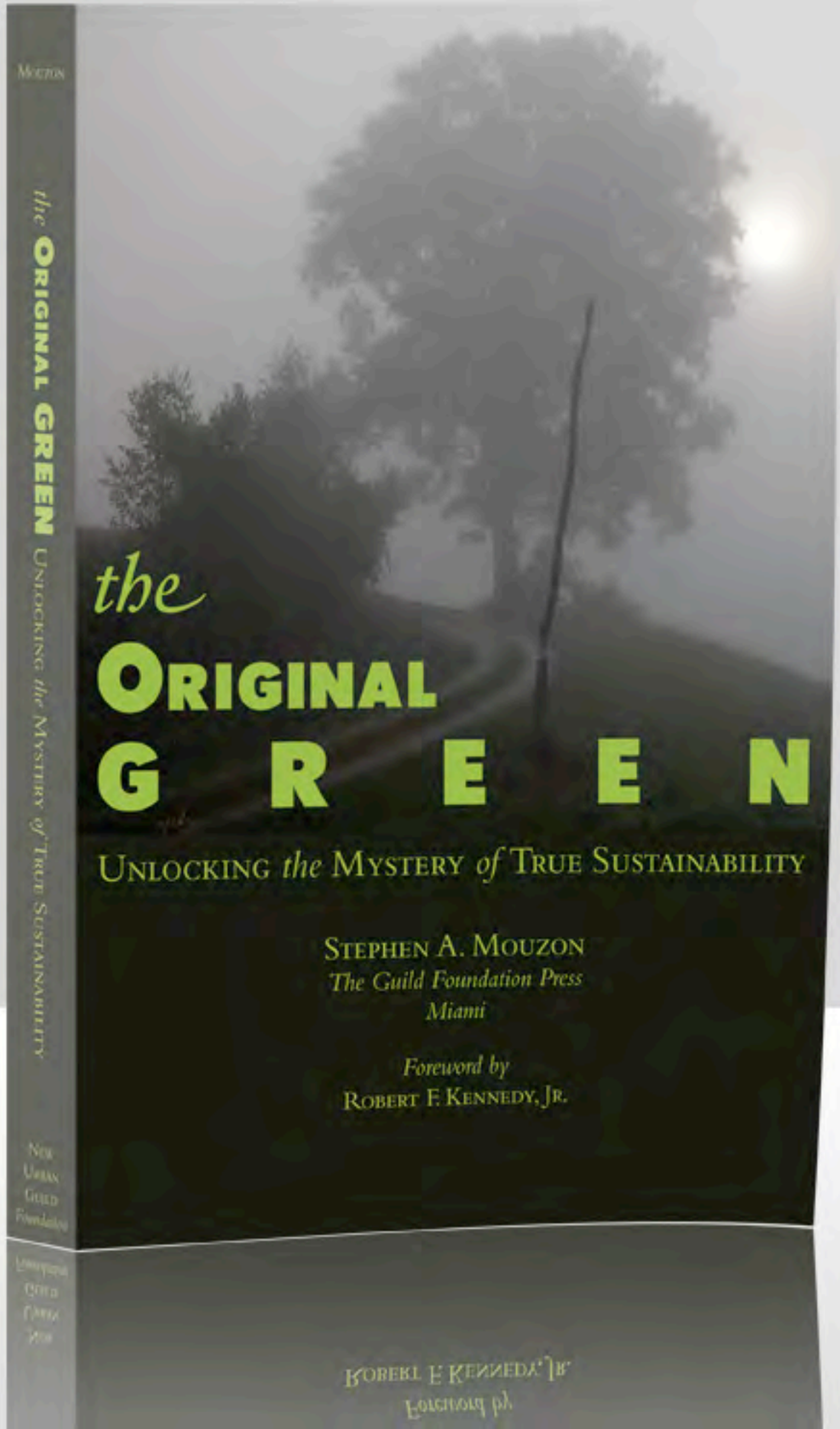
Santa Fe

11MAR07

Stephen A. Mouzon, AIA CNU LEED

The New Urban Guild

Miami Beach, Florida, USA


the ORIGINAL GREEN
UNLOCKING the MYSTERY of TRUE SUSTAINABILITY
STEPHEN A. MOUZON
The Guild Foundation Press
Miami
Foreword by
ROBERT F. KENNEDY, JR.

What's *the* Problem?

10. *the* Absence *of* Plain-Spoken Sustainability

9. *the* Danger *of* Wishes

8. *the* Dilemma *of* Global Warming

7. *the* Fate *of* "Ought-To"

6. *the* Problem *of* Growth

5. *the* Trouble *with* Consumption

4. *the* Achilles Heel *of* Architecture

3. *the* Carbon Focus

2. *the* Supply-Side Focus

1. *the* 2.5 Billion People

www.originalgreen.org

10. *the* Absence *of* Plain-Spoken Sustainability

www.originalgreen.org

9. *the* Danger *of* Wishes

www.originalgreen.org

8. *the* Dilemma *of* Global Warming

www.originalgreen.org

7. *the* Fate *of* "Ought-To"

www.originalgreen.org

6. *the* Problem of Growth

www.originalgreen.org

5. *the* Trouble *with* Consumption

www.originalgreen.org

Planned Obsolescence

www.originalgreen.org

Throwaway Buildings

www.originalgreen.org

Throwaway Places

www.originalgreen.org

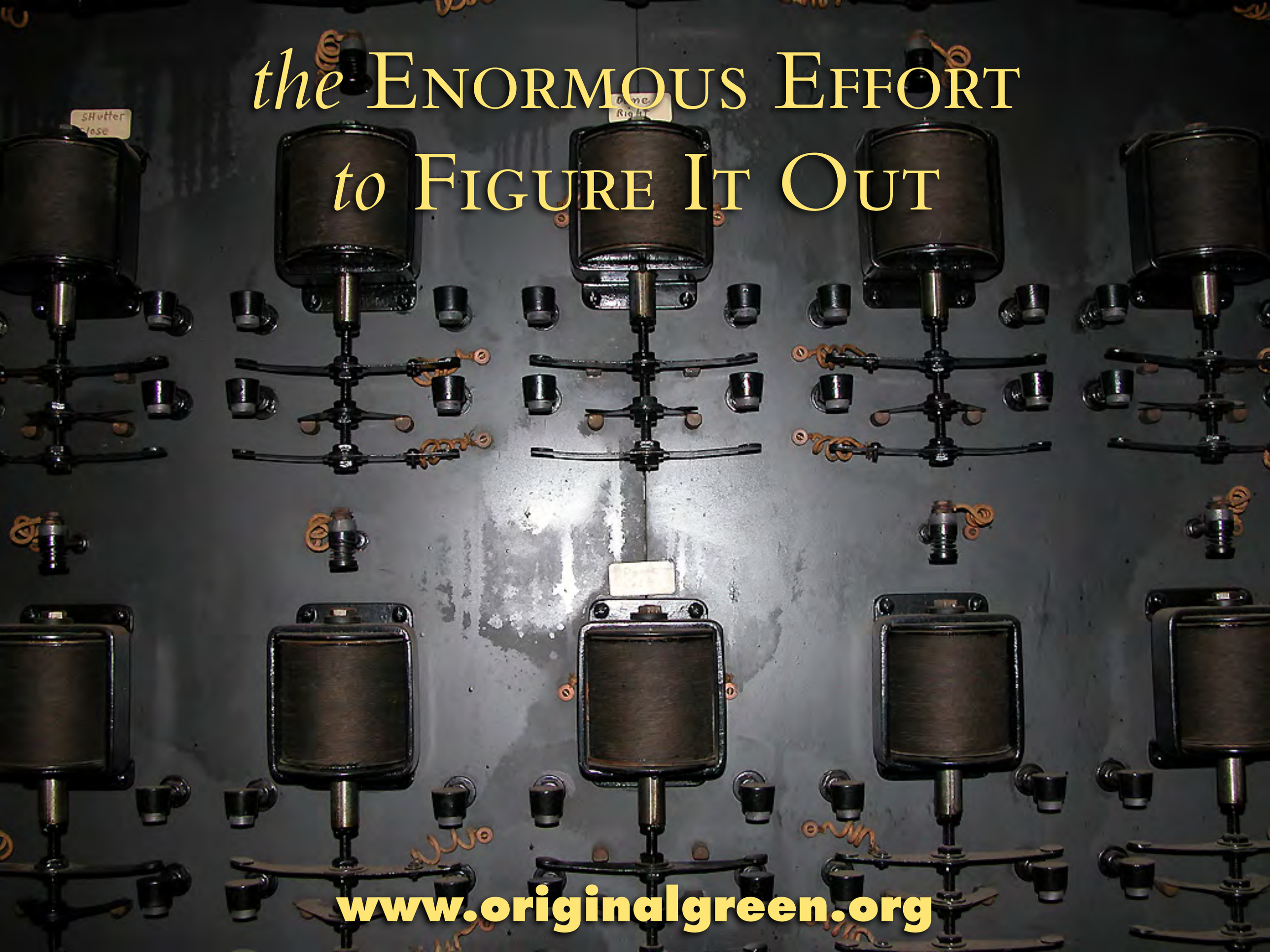
4. *the* Achilles Heel *of* Architecture

www.originalgreen.org

the Necessity *of* Uniqueness

www.originalgreen.org

the Enormous Effort *to* Figure It Out

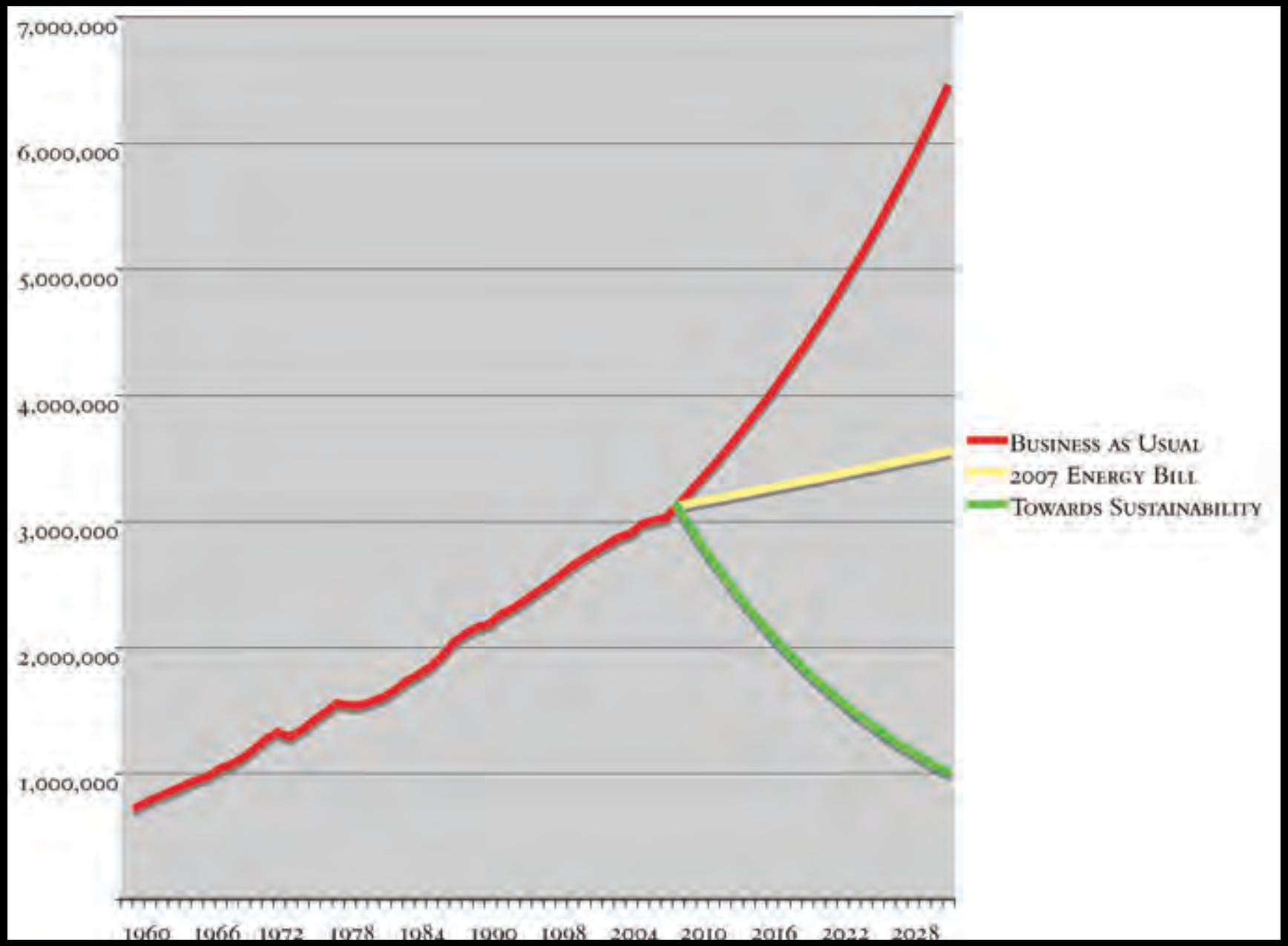


www.originalgreen.org

3. *the* Carbon Focus

www.originalgreen.org

2. *the* Supply-Side Focus



www.originalgreen.org

1. *the* 2.5 Billion People

What Can We Do?

10. *the* Things *that* Work

9. *the* Diversified Extent

8. *the* Diversified Environment

7. *the* Diversified Means

6. *the* Expanded Uses

5. *the* Narrowed Resource Range

4. *the* Expanded Comfort Range

3. *the* Localized Operations

2. *the* Sharing *of* Wisdom

1. *the* Involvement *of* Everyone

www.originalgreen.org

10. *the* Things *that* Work

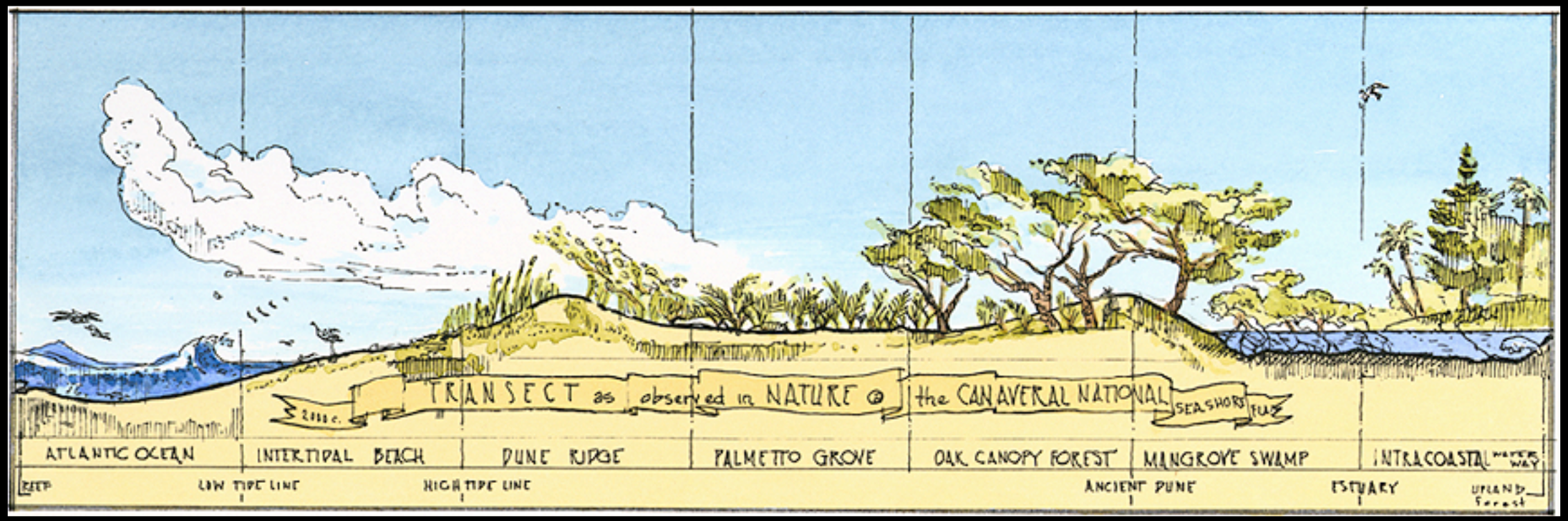
www.originalgreen.org

9. *the* Diversified Extent

www.originalgreen.org

8. *the* Diversified Environment

The Transect is the operating system of the New Urbanism.
The idea of the Transect originated in the 1900's as an ecological tool used to describe a series of natural habitats, but transects have existed in nature since the dawn of time.



www.originalgreen.org

the Transect

- ★ T1: Natural (the wilderness)
- ★ T2: Rural (fields & meadows)
- ★ T3: Suburban (the outskirts)
- ★ T4: General Urban (neighborhoods)
- ★ T5: Urban Center (main street)
- ★ T6: Urban Core (downtown)

7. *the* Diversified Means

www.originalgreen.org

6. *the* Expanded Uses

www.originalgreen.org

5. *the* Narrowed Resource Range

www.originalgreen.org

4. *the* Expanded Comfort Range

www.originalgreen.org

Conditioning *the* Buildings First

Conditioning the Humans First

www.originalgreen.org

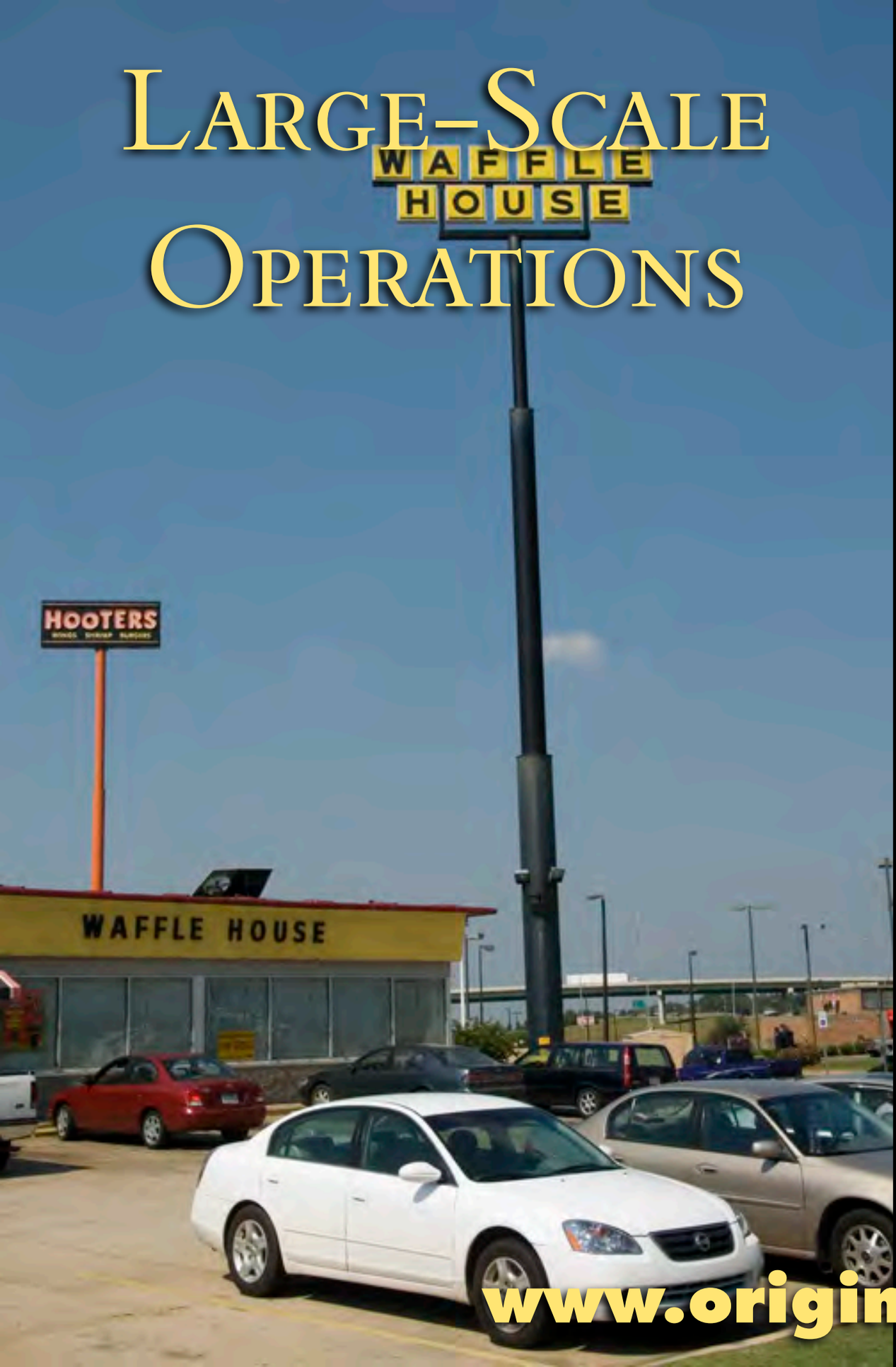
Living *in* Season

www.originalgreen.org

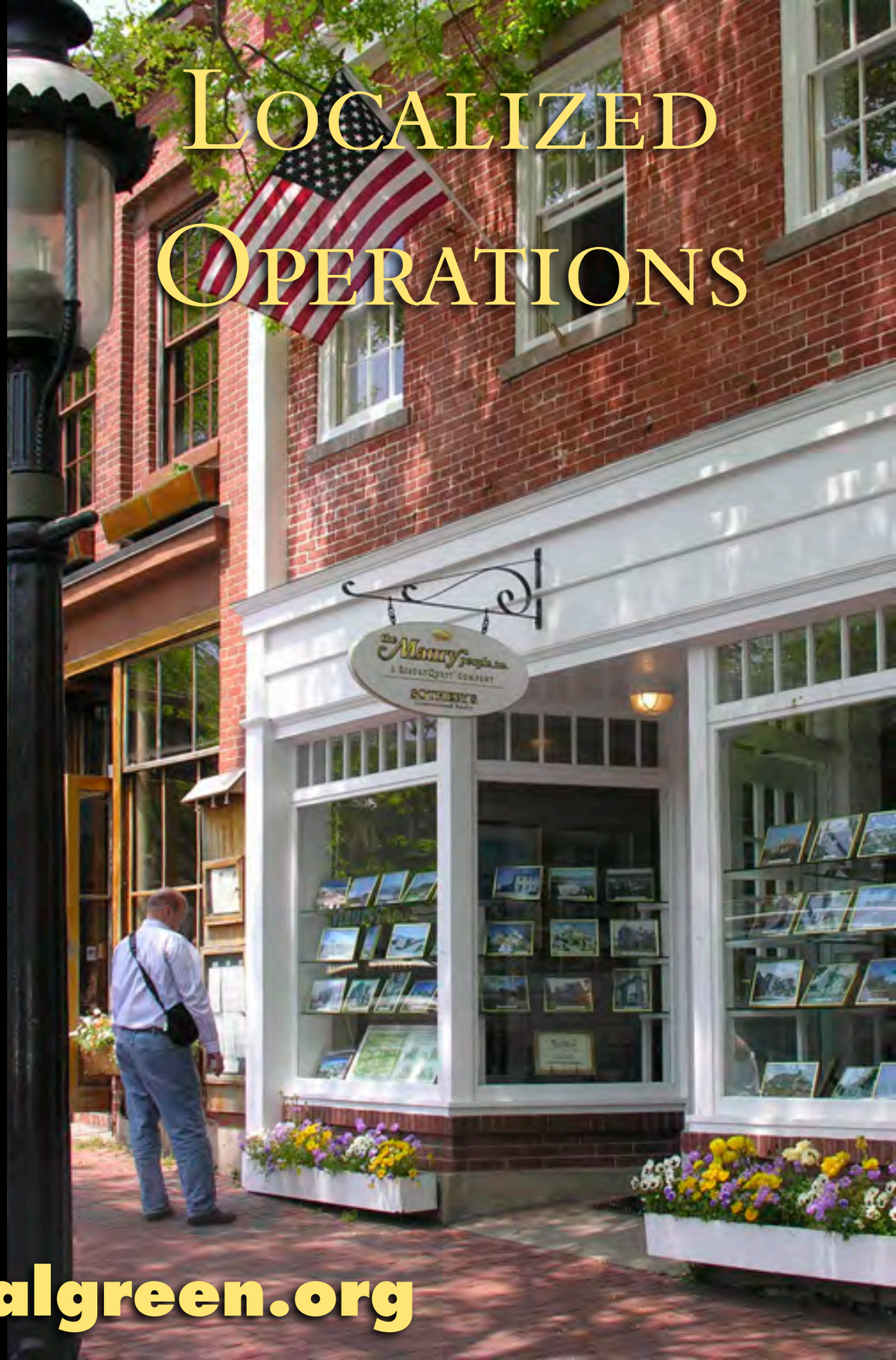
3. *the* Localized Operations

www.originalgreen.org

Large-Scale Operations



Localized Operations



www.originalgreen.org

Web of Daily Life

www.originalgreen.org

Park
www.originalgreen.org

Post
Office
www.originalgreen.org

Doctor
www.originalgreen.org

Accountant
www.originalgreen.org

Bank
www.originalgreen.org

Vitamins
www.originalgreen.org

Groceries
www.originalgreen.org

Groceries
www.originalgreen.org

Hardware
www.originalgreen.org

Bookstore
www.originalgreen.org

Apple Store
www.originalgreen.org

Restaurants
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

Web of Daily Life

www.originalgreen.org

2. *the* Sharing *of* Wisdom

www.originalgreen.org

1. *the* Involvement *of* Everyone

www.originalgreen.org

What Is A Living Tradition?

- ★ Inspiration
- ★ Resonance
- ★ Repetition
- ★ Adoption

www.originalgreen.org

Workings *of a* Living Tradition

- ★ Easily Perceived
- ★ Easily Loved
- ★ Easily Performed
- ★ ... by the People, not just the Specialists

www.originalgreen.org

The Open Canon

- ★ Limitations > Necessity > Invention
- ★ Millions of Minds
- ★ Inventiveness of the Pre-Employed
- ★ Inventiveness of Practice
- ★ Inventiveness of Age & Experience

www.originalgreen.org

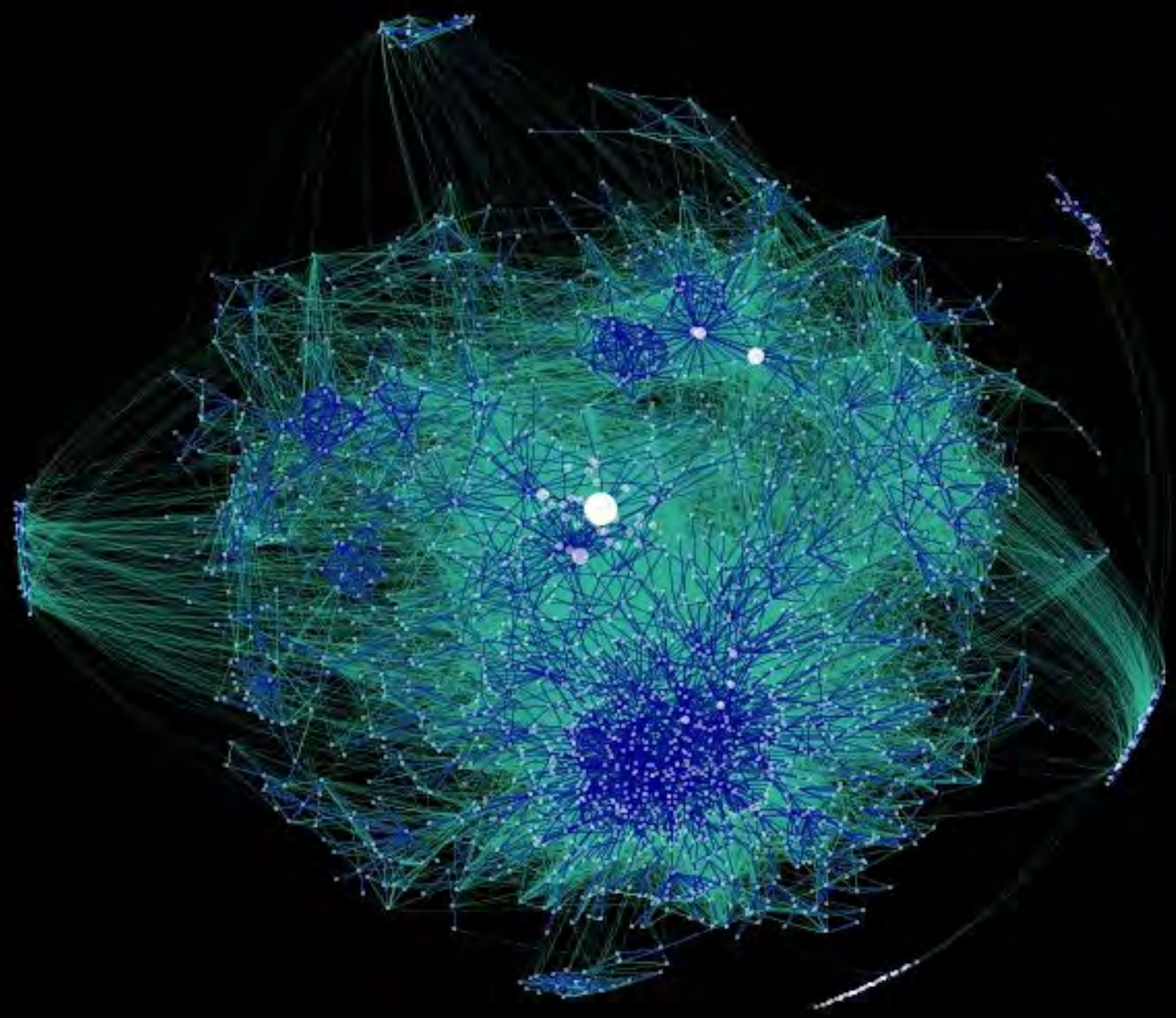
The Transmission Device

www.originalgreen.org

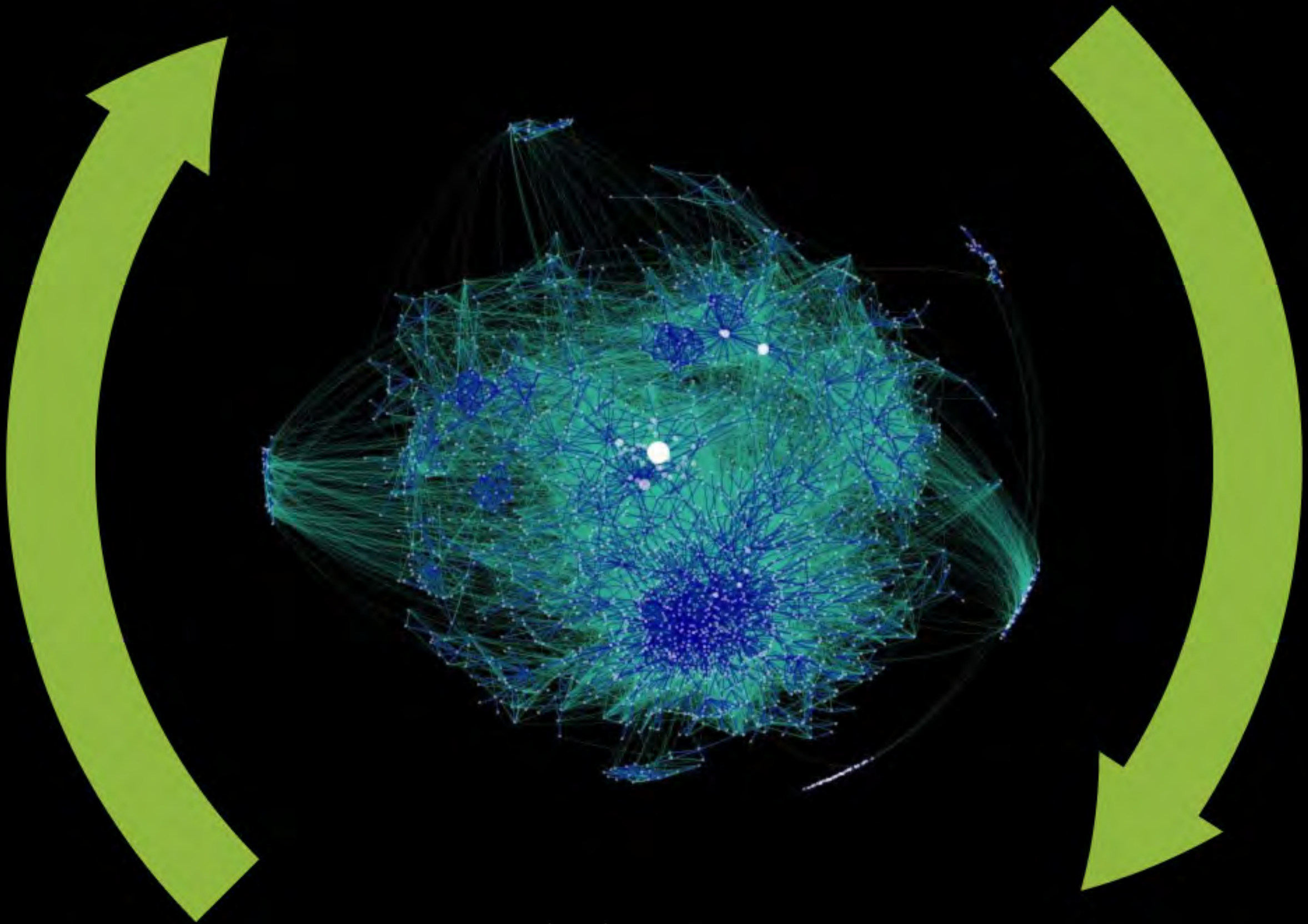
Wanda's Questions

www.originalgreen.org

Image Source: http://msa4.wordpress.com



www.originalgreen.org



www.originalgreen.org

Gizmo Green
www.originalgreen.org

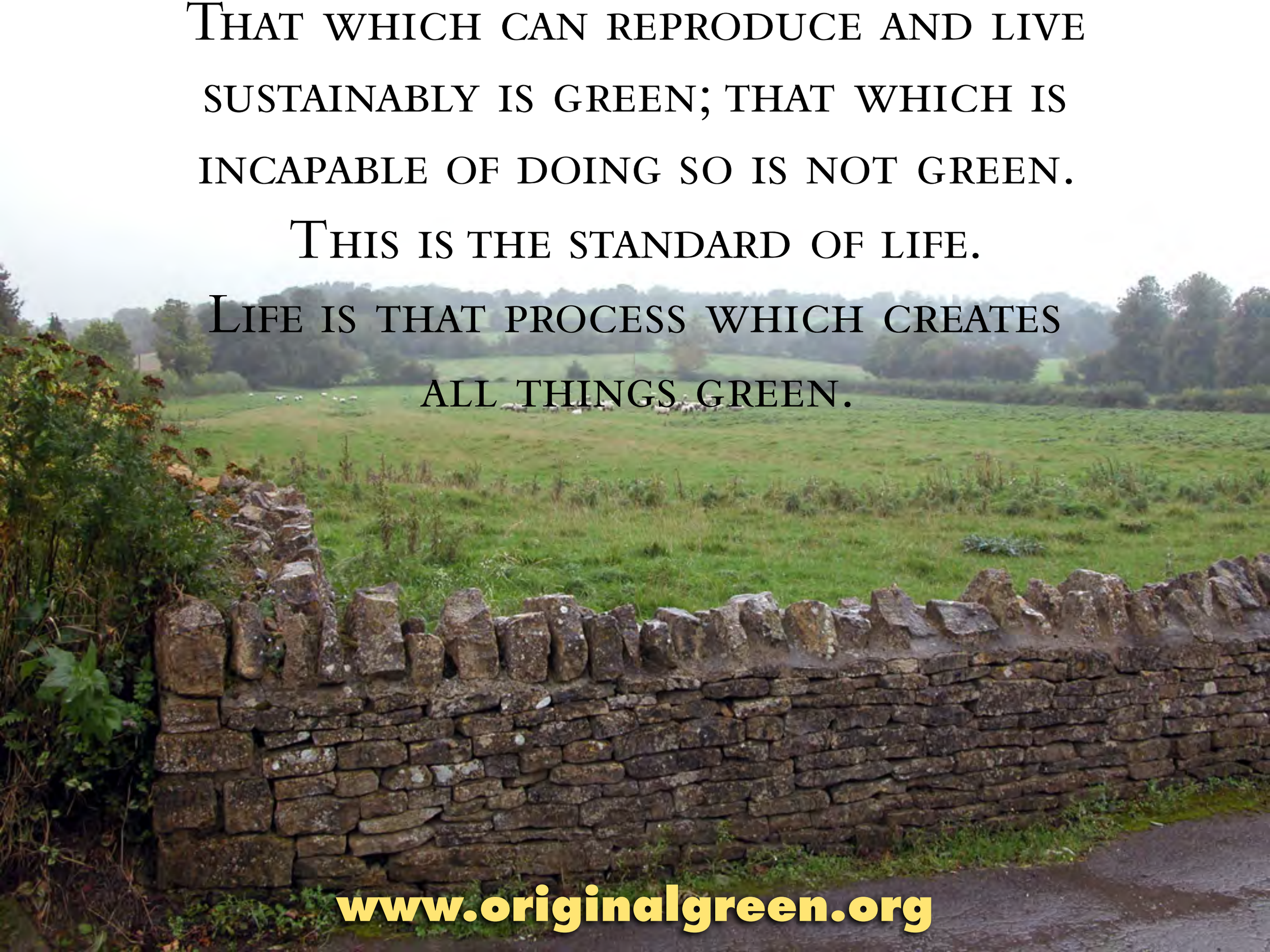
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

"This is how we build here"
www.originalgreen.org
BROADWAY
DOLLS & BEARS
OLIVE BRANCH
BED & BREAKFAST
GUEST HOUSE
PATHLOW
GUEST HOUSE
BED & BREAKFAST
30
Christmas Box
ANTIQ



That which can reproduce and live sustainably is green; that which is incapable of doing so is not green. This is the standard of life. Life is that process which creates all things green.

www.originalgreen.org

What Is
the Original Green?
www.originalgreen.org
Christmas Box
BROADWAY DOLLS & BEARS
OLIVE BRANCH BED & BREAKFAST GUEST HOUSE
PATHLOW GUEST HOUSE BED & BREAKFAST
30

The Original Green

The Original Green

PLACES

The Original Green

The Original Green

PLACES NOURISHABLE BUILDINGS

The Original Green

PLACES

NOURISHABLE

ACCESSIBLE

BUILDINGS

The Original Green

PLACES

BUILDINGS

NOURISHABLE

ACCESSIBLE

SERVICEABLE

The Original Green

PLACES

NOURISHABLE

ACCESSIBLE

SERVICEABLE

SECURABLE

BUILDINGS

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

ACCESSIBLE

SERVICEABLE

SECURABLE

The Original Green

PLACES

NOURISHABLE LOVABLE

ACCESSIBLE DURABLE

SERVICEABLE

SECURABLE

BUILDINGS

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

ACCESSIBLE DURABLE

SERVICEABLE FLEXIBLE

SECURABLE

The Original Green

PLACES

NOURISHABLE LOVABLE

ACCESSIBLE DURABLE

SERVICEABLE FLEXIBLE

SECURABLE FRUGAL

BUILDINGS

The Original Green

PLACES

NOURISHABLE LOVABLE

ACCESSIBLE DURABLE

SERVICEABLE FLEXIBLE

SECURABLE FRUGAL

BUILDINGS

The Original Green

PLACES

NOURISHABLE LOVABLE

0.0 1.0

ACCESSIBLE DURABLE

SERVICEABLE FLEXIBLE

SECURABLE FRUGAL

BUILDINGS

The Original Green

PLACES

NOURISHABLE LOVABLE

0.0 1.0

ACCESSIBLE DURABLE

0.0 1.0

SERVICEABLE FLEXIBLE

SECURABLE FRUGAL

BUILDINGS

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

0.0 1.0

ACCESSIBLE DURABLE

0.0 1.0

SERVICEABLE FLEXIBLE

0.0 1.0

SECURABLE FRUGAL

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

0.0 1.0

ACCESSIBLE DURABLE

0.0 1.0

SERVICEABLE FLEXIBLE

0.0 1.0

SECURABLE FRUGAL

0.0 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

0.0 1.0

×

ACCESSIBLE DURABLE

0.0 1.0

SERVICEABLE FLEXIBLE

0.0 1.0

SECURABLE FRUGAL

0.0 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

0.0 × 1.0

ACCESSIBLE DURABLE

0.0 × 1.0

SERVICEABLE FLEXIBLE

0.0 × 1.0

SECURABLE FRUGAL

0.0 × 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

0.0 × 1.0

ACCESSIBLE DURABLE

0.0 × 1.0

SERVICEABLE FLEXIBLE

0.0 × 1.0

SECURABLE FRUGAL

0.0 × 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE 0.0 — 1.0 × **LOVABLE** 0.0 — 1.0

ACCESSIBLE 0.0 — 1.0 × **DURABLE** 0.0 — 1.0

SERVICEABLE 0.0 — 1.0 × **FLEXIBLE** 0.0 — 1.0

SECURABLE 0.0 — 1.0 × **FRUGAL** 0.0 — 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE 0.0 – 1.0 × **LOVABLE** 0.0 – 1.0

ACCESSIBLE 0.0 – 1.0 × **DURABLE** 0.0 – 1.0

SERVICEABLE 0.0 – 1.0 × **FLEXIBLE** 0.0 – 1.0

SECURABLE 0.0 – 1.0 × **FRUGAL** 0.0 – 1.0

The Original Green

PLACES BUILDINGS

NOURISHABLE 0.0 – 1.0 × **LOVABLE** 0.0 – 1.0

ACCESSIBLE 0.0 – 1.0 × **DURABLE** 0.0 – 1.0

SERVICEABLE 0.0 – 1.0 × **FLEXIBLE** 0.0 – 1.0

SECURABLE 0.0 – 1.0 × **FRUGAL**

The Original Green

PLACES

BUILDINGS

NOURISHABLE (0.0 – 1.0)	×	LOVABLE (0.0 – 1.0)
ACCESSIBLE (0.0 – 1.0)	×	DURABLE (0.0 – 1.0)
SERVICEABLE (0.0 – 1.0)	×	FLEXIBLE (0.0 – 1.0)
SECURABLE (0.0 – 1.0)	×	FRUGAL (0.0 – 1.0)

The Original Green

PLACES

BUILDINGS

NOURISHABLE	LOVABLE		
0.0 — 1.0	0.0 — 1.0		
ACCESSIBLE	DURABLE		
0.0 — 1.0	0.0 — 1.0		
SERVICEABLE	FLEXIBLE		
0.0 — 1.0	0.0 — 1.0		
SECURABLE	FRUGAL		
0.0 — 1.0	0.0 — 1.0		

The Original Green

PLACES

BUILDINGS

NOURISHABLE 0.0 – 1.0 × **LOVABLE** 0.0 – 1.0

ACCESSIBLE 0.0 – 1.0 × **DURABLE** 0.0 – 1.0

SERVICEABLE 0.0 – 1.0 × **FLEXIBLE** 0.0 – 1.0

SECURABLE 0.0 – 1.0 × **FRUGAL** 0.0 – 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE 0.0 – 1.0 × **LOVABLE** 0.0 – 1.0

ACCESSIBLE 0.0 – 1.0 × **DURABLE** 0.0 – 1.0

SERVICEABLE 0.0 – 1.0 × **FLEXIBLE** 0.0 – 1.0

SECURABLE 0.0 – 1.0 × **FRUGAL** 0.0 – 1.0

The Original Green

PLACES

BUILDINGS

NOURISHABLE 0.0 – 1.0	LOVABLE 0.0 – 1.0
ACCESSIBLE 0.0 – 1.0	DURABLE 0.0 – 1.0
SERVICEABLE 0.0 – 1.0	FLEXIBLE 0.0 – 1.0
SECURABLE 0.0 – 1.0	FRUGAL 0.0 – 1.0

Settlement

Neighborhood

www.originalgreen.org

www.originalgreen.org

Nourishable Places
www.originalgreen.org

Tightly-Embedded
www.originalgreen.org

Opportunistic
www.originalgreen.org

Slope-Adaptable
www.originalgreen.org

Multi-Layered
www.originalgreen.org

Scales of Agriculture

- ★ Employing Farm
- ★ Family Farm
- ★ Allotment Garden
- ★ Edge Yard Garden
- ★ Courtyard Garden
- ★ Roof Garden
- ★ Arbor Garden
- ★ Wall Garden
- ★ Balcony Garden
- ★ Window Garden

www.originalgreen.org

Employing Farm
www.originalgreen.org

Family Farm
www.originalgreen.org

Allotment Garden
www.originalgreen.org

Edge Yard (Front Yard) Garden

www.originalgreen.org

Courtyard Garden
www.originalgreen.org

Roof *or* Terrace Garden

www.originalgreen.org

Arbor Garden
www.originalgreen.org

Wall Garden
www.originalgreen.org

Balcony Garden
www.originalgreen.org

Window Garden

www.originalgreen.org

Farmer's Market
BABY RED POTATOES
2 00 LB
KALE
FRESH TENDER ASPARAGUS
2 50 LB
2 95 LB
60¢
60¢
3 99 A POUND
99¢ LB
2 99 LB
www.originalgreen.org

Accessible Places
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

Walkability: Alleys

www.originalgreen.org

Walkability: Frontages

www.originalgreen.org

Walkability: Porches

www.originalgreen.org

Serviceable Places

www.originalgreen.org

Reducing Property Values *of the* Adjacent Homes

www.originalgreen.org

Affordability: Cottages

www.originalgreen.org

Affordability: Rear Lane Addresses

www.originalgreen.org

Affordability: Mews

www.originalgreen.org

Securable Places
7
7
www.originalgreen.org

SW 140 CT
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

Lovable Buildings

www.originalgreen.org

Three Sources *of* Lovability

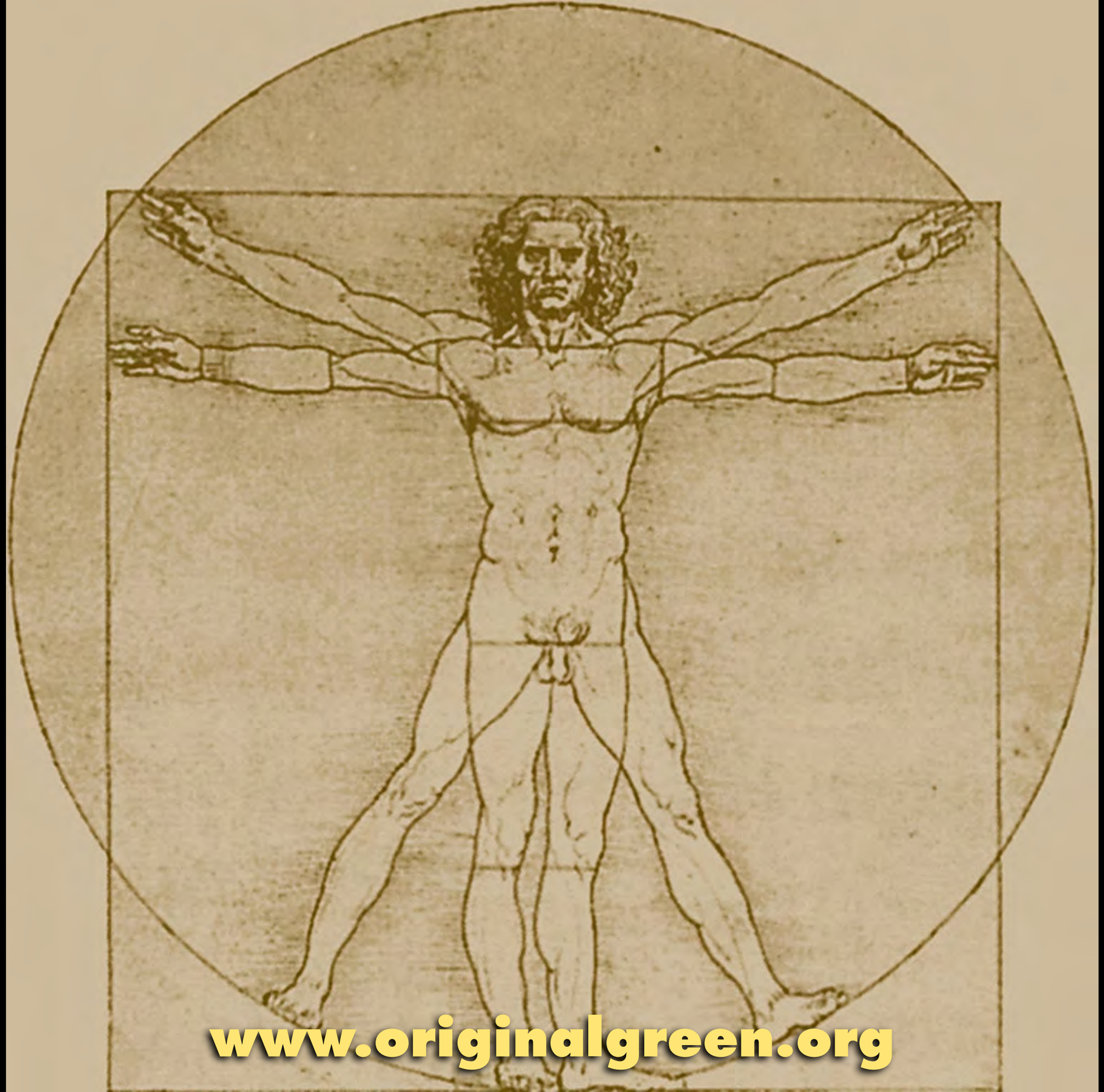
- ★ Things *that* Reflect Us
- ★ Things *that* Delight Us
- ★ Things *that* Put Us *in* Harmony

www.originalgreen.org

Things *that* Reflect Us

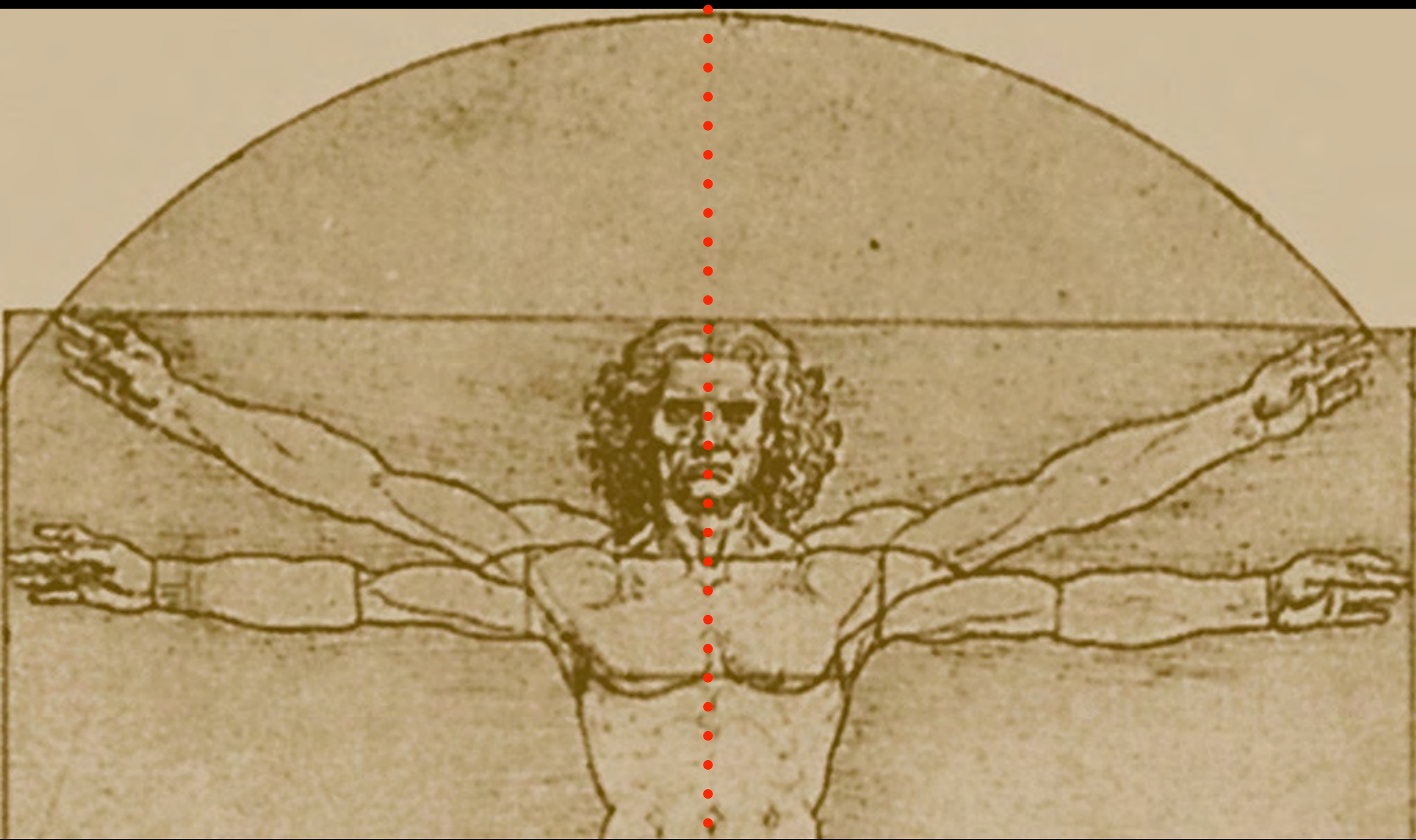
- ★ Reflecting *the* Human Form
- ★ Reflecting *the* Culture of our Groups
- ★ Reflecting *the* Culture of our Region
- ★ Reflecting *the* Culture of our Nation

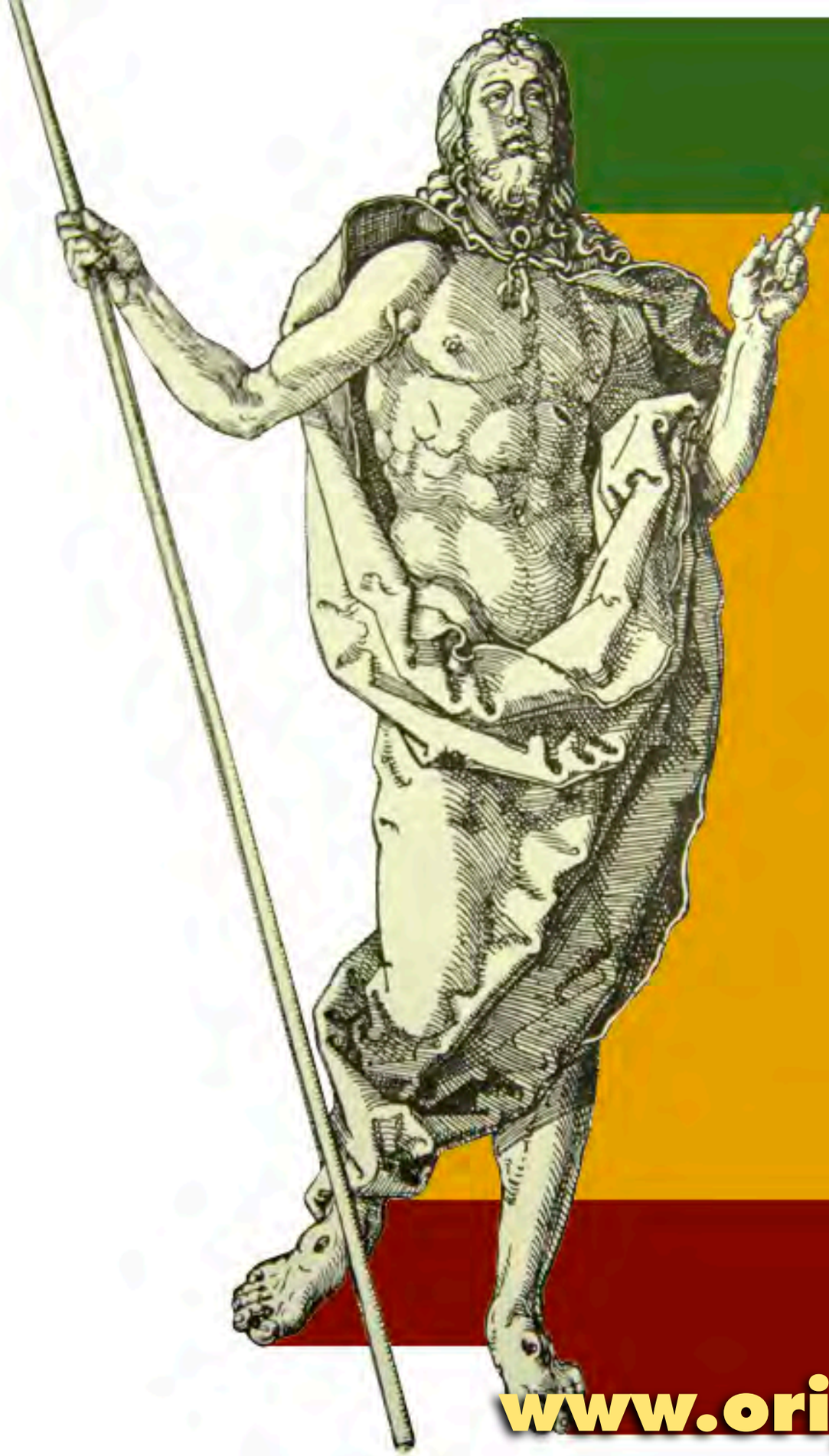
www.originalgreen.org



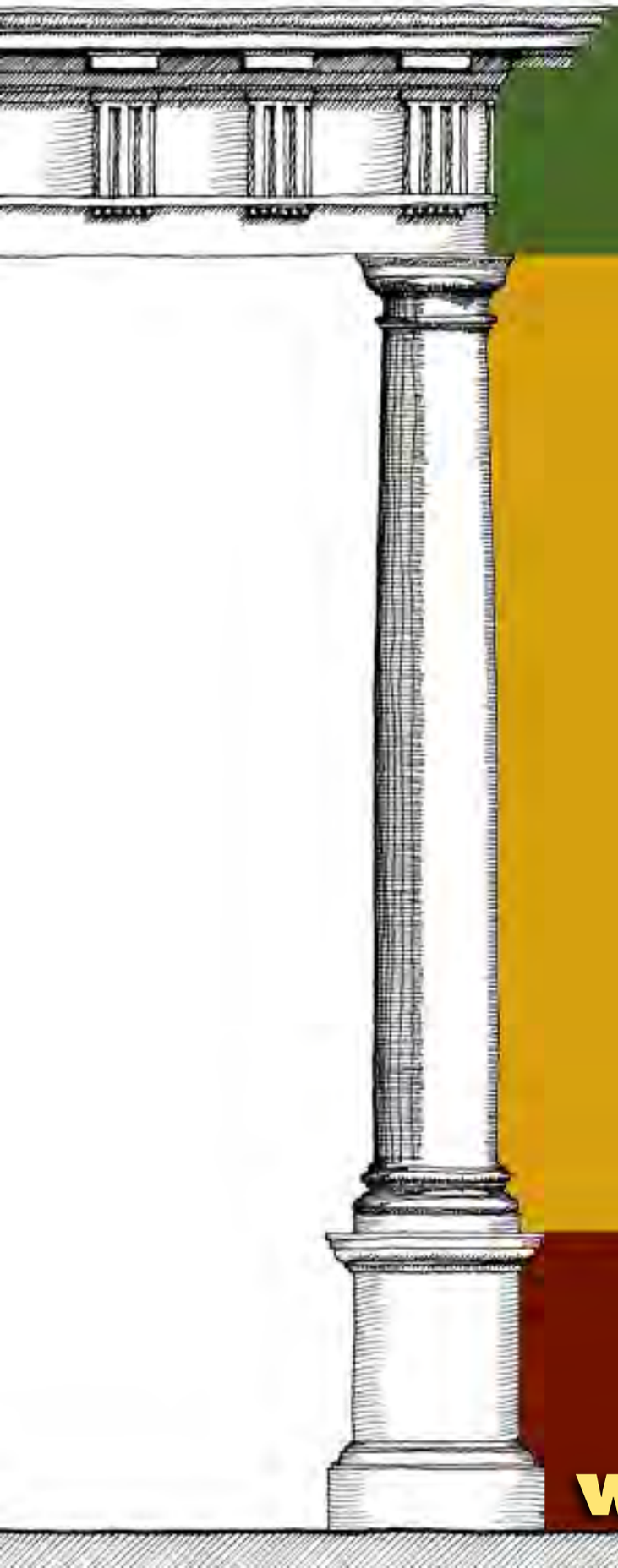
www.originalgreen.org

Horizontal Arrangement



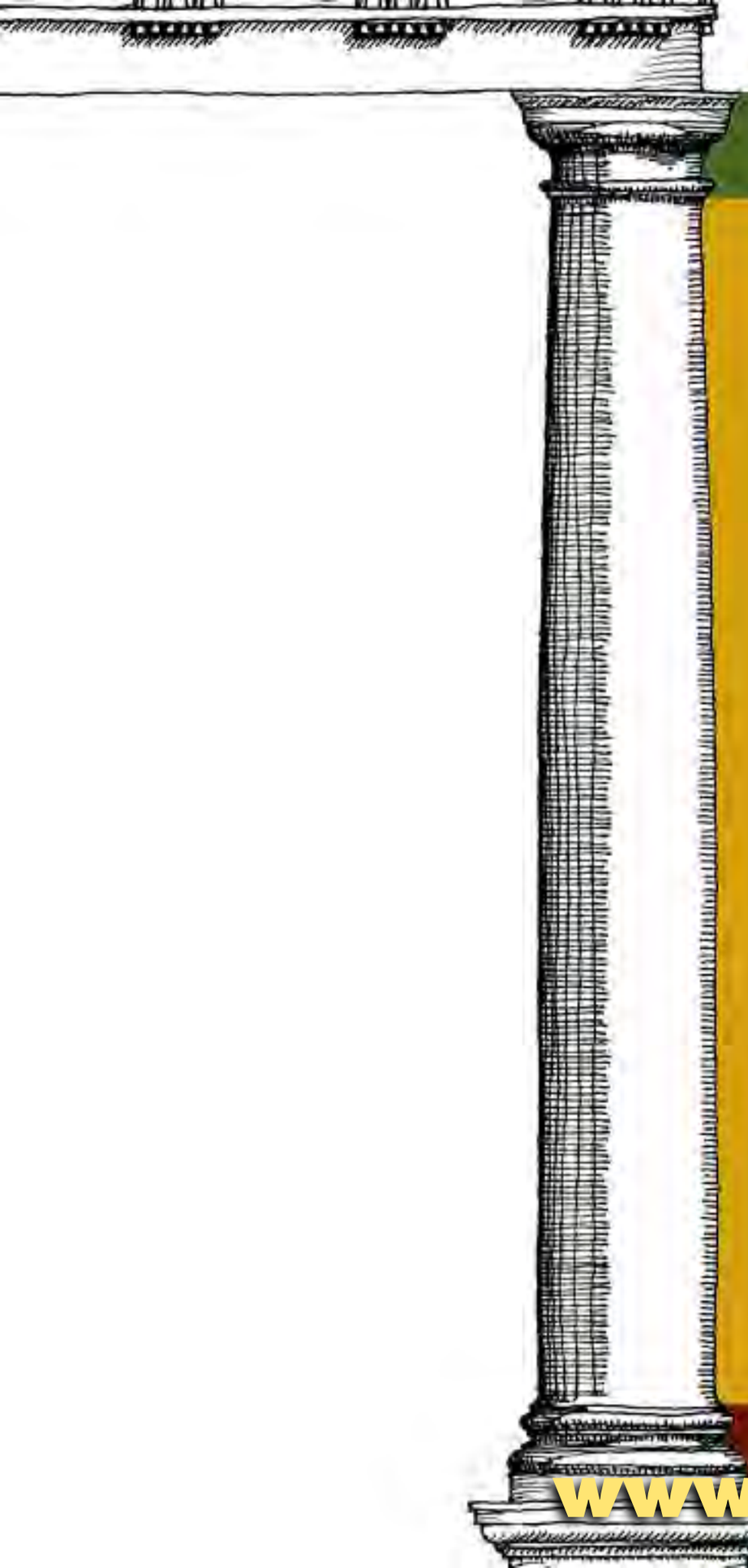


www.originalgreen.org

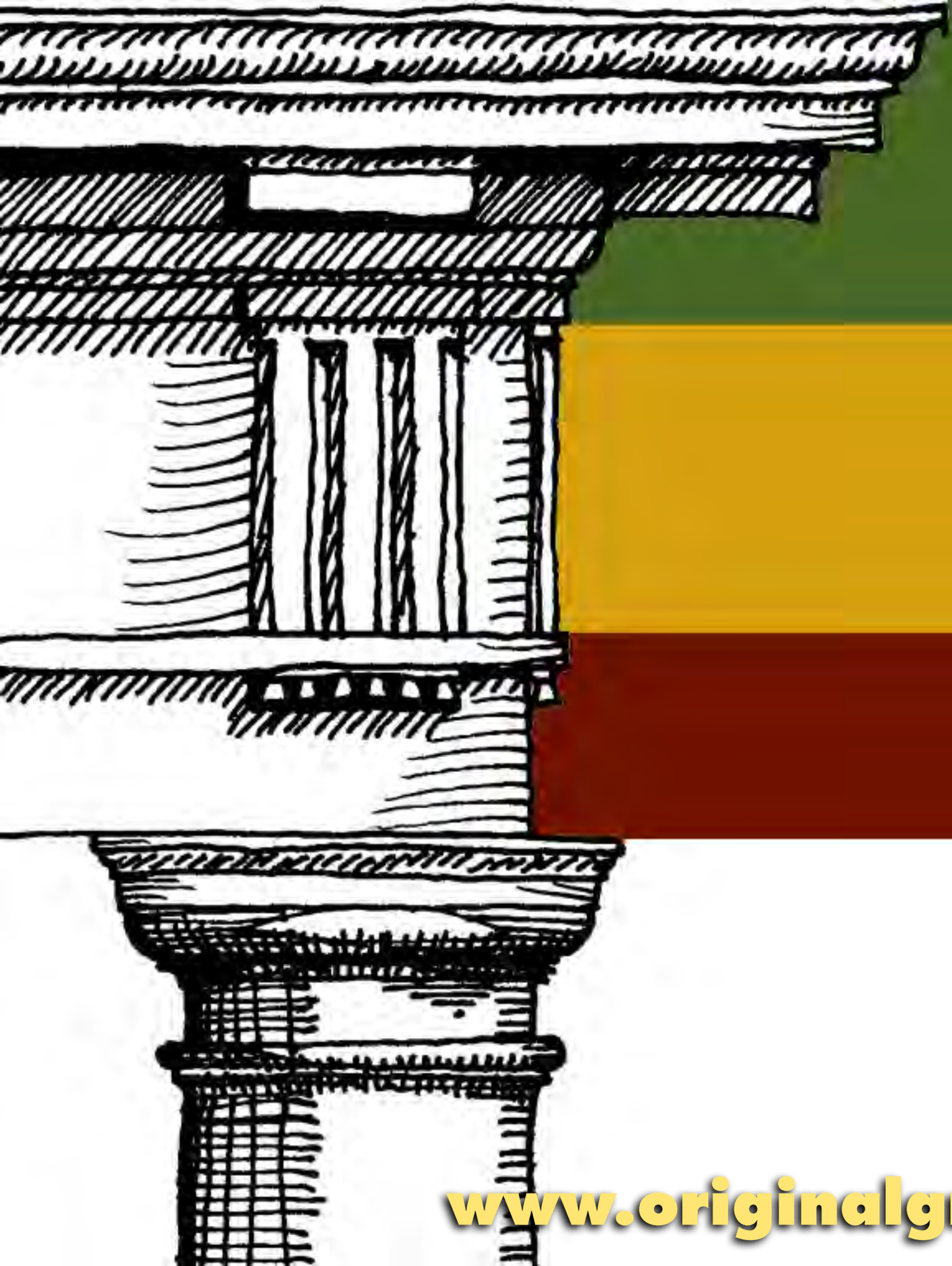


www.originalgreen.org

www.originalgreen.org



www.originalgreen.org



www.originalgreen.org

www.originalgreen.org

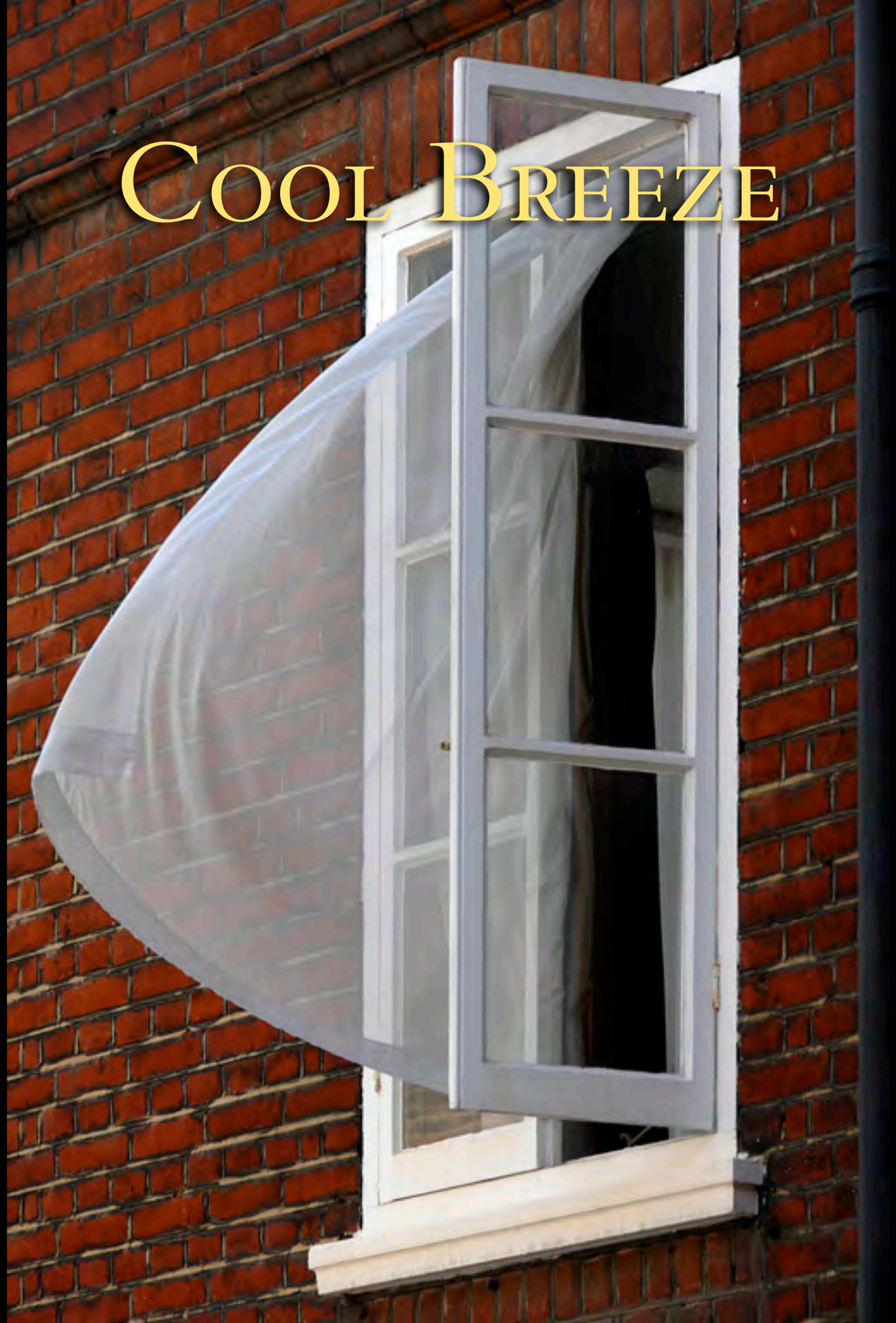
Things *that* Delight Us

- ★ Sensual
- ★ Group
- ★ Memory
- ★ Intellectual
- ★ Sheltering
- ★ Challenging

www.originalgreen.org

Sensual Delight
www.originalgreen.org

Warmth


Cool Breeze

Sounds

Sights

Group Delight
www.originalgreen.org

Sports

Political Assembly

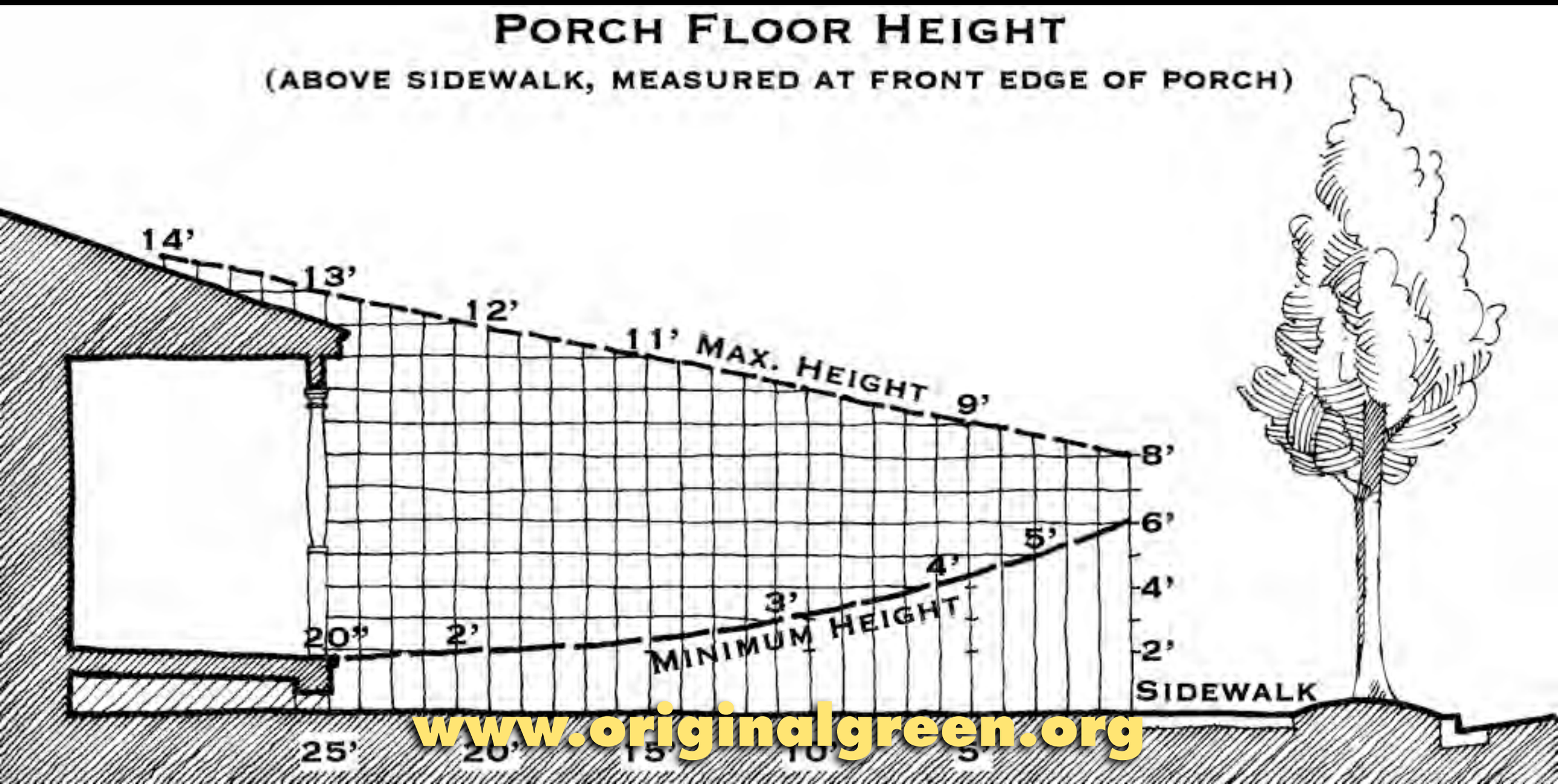
Social Assembly

Setting *the* Stage

- ★ Accidental Meetings
- ★ Geometry

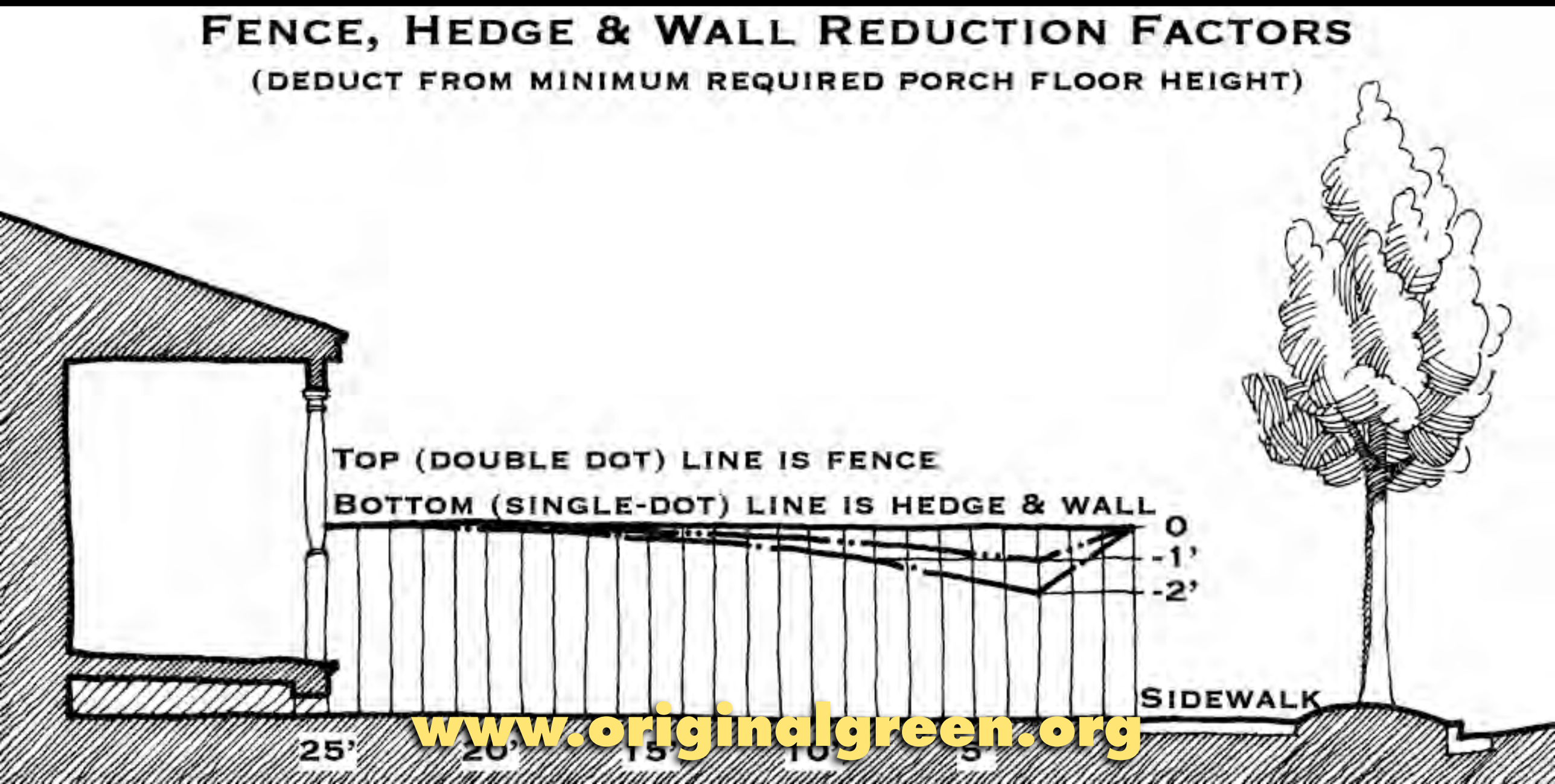
www.originalgreen.org

Front Porch Principles



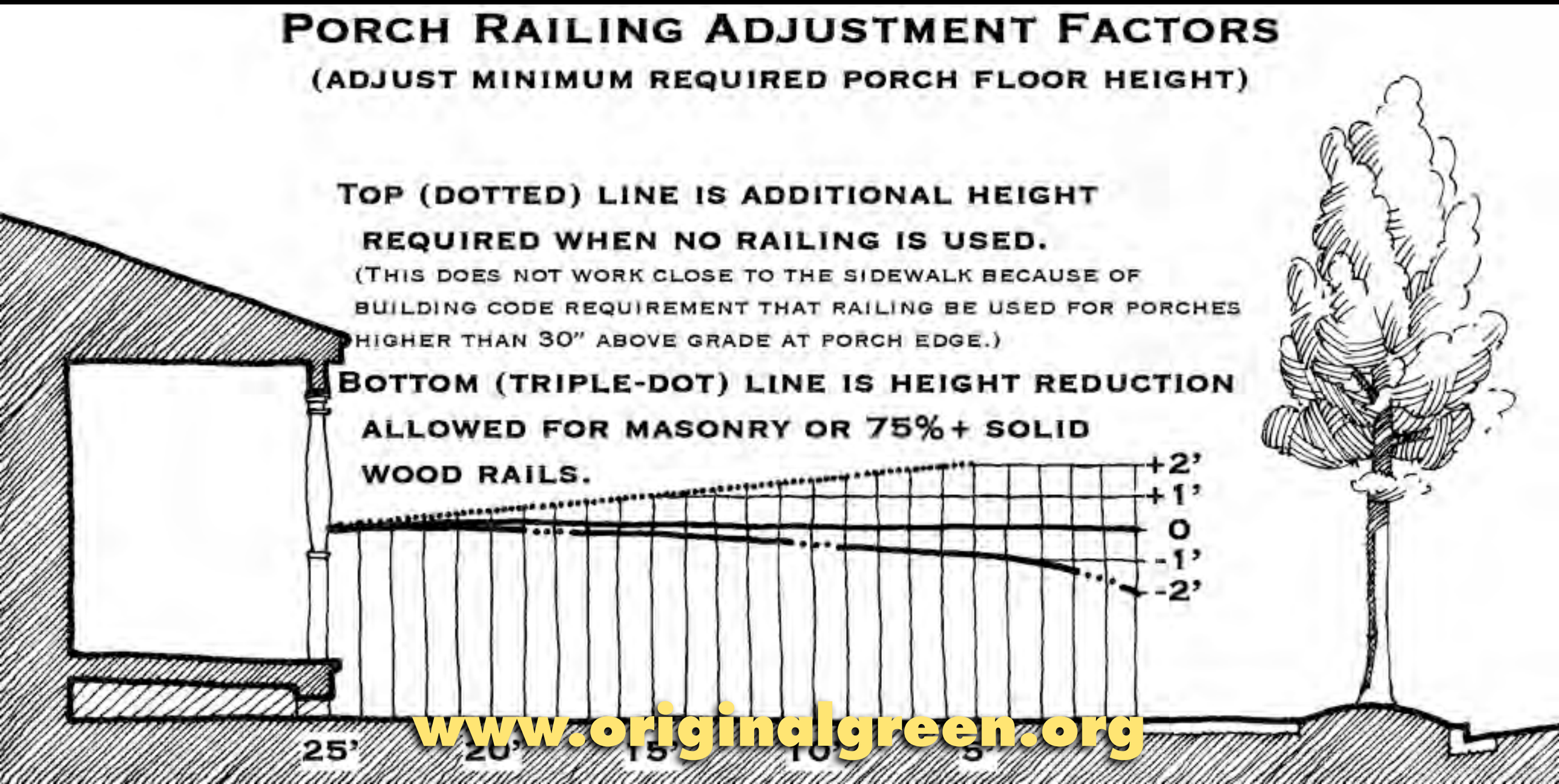
www.originalgreen.org

Front Porch Principles



www.originalgreen.org

Front Porch Principles



www.originalgreen.org

Memory Delight

www.originalgreen.org

Intellectual Delight
www.originalgreen.org

Sheltering Delight
www.originalgreen.org

Embracing Spaces

Challenging Delight

www.originalgreen.org

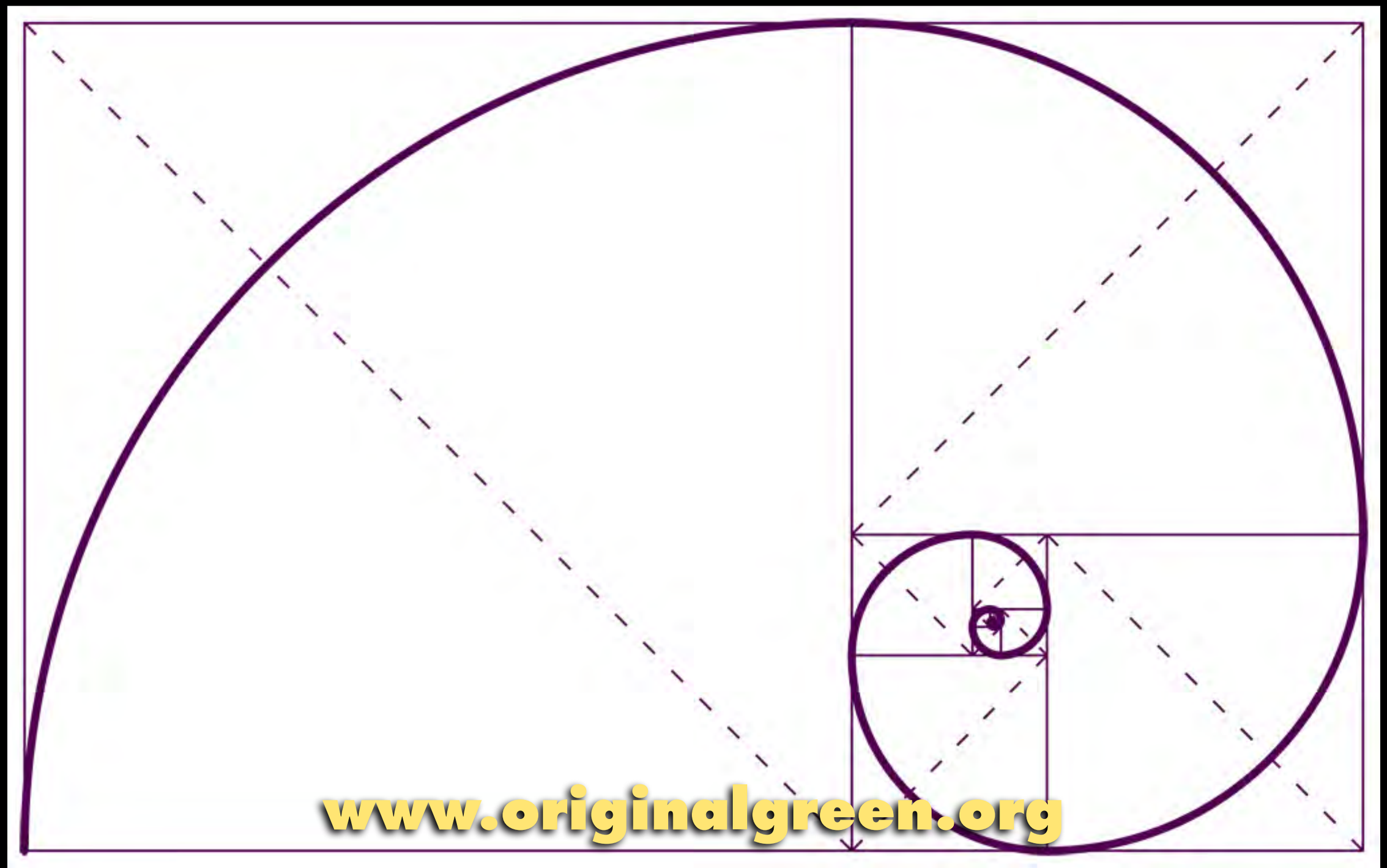
Bracing Places

Things *that* Put Us *in* Harmony

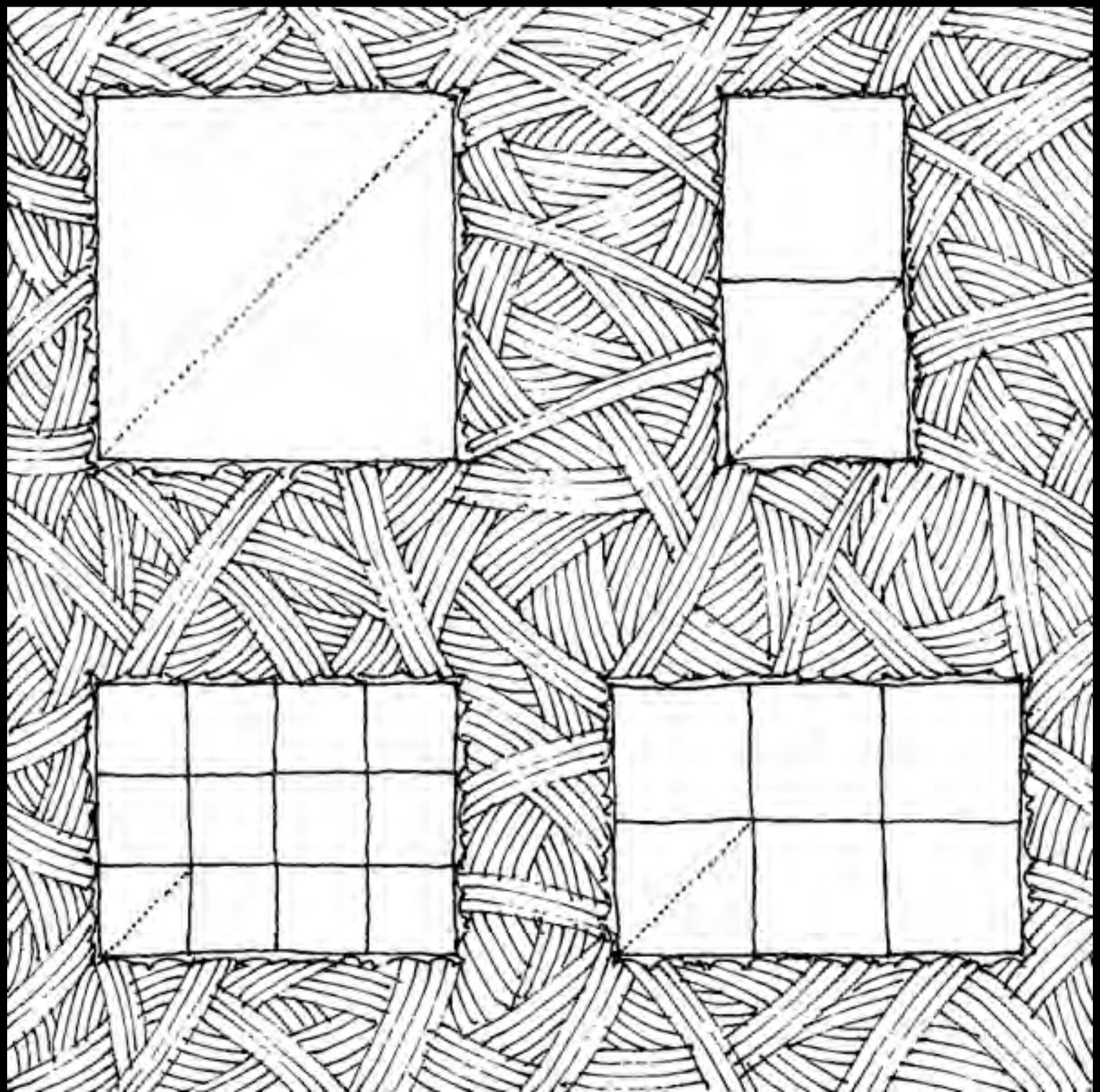
- ★ Mathematical
- ★ Simplicity
- ★ Authenticity
- ★ Natural Processes
- ★ Natural Laws
- ★ Natural Forms
- ★ Harmony *with the* Region

www.originalgreen.org

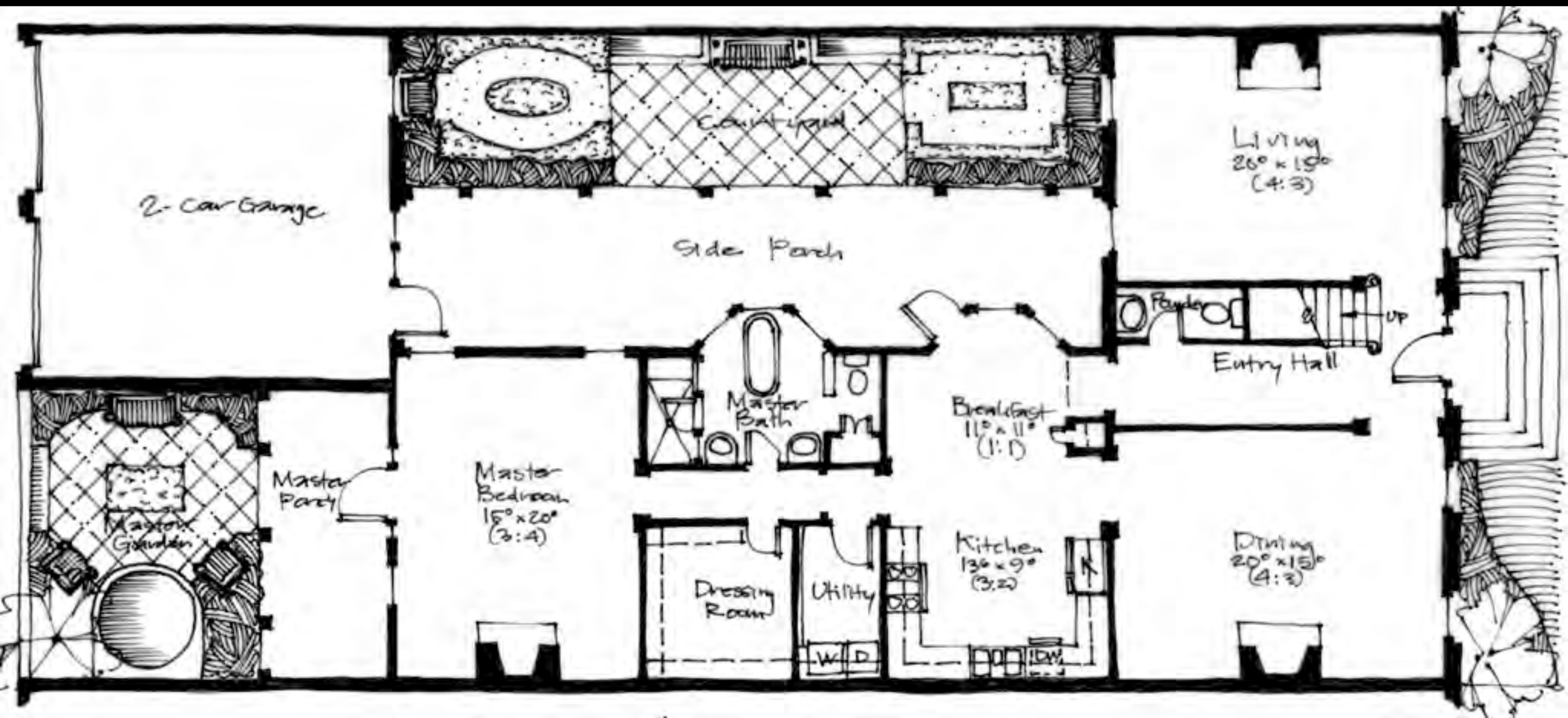
Mathematical Harmony



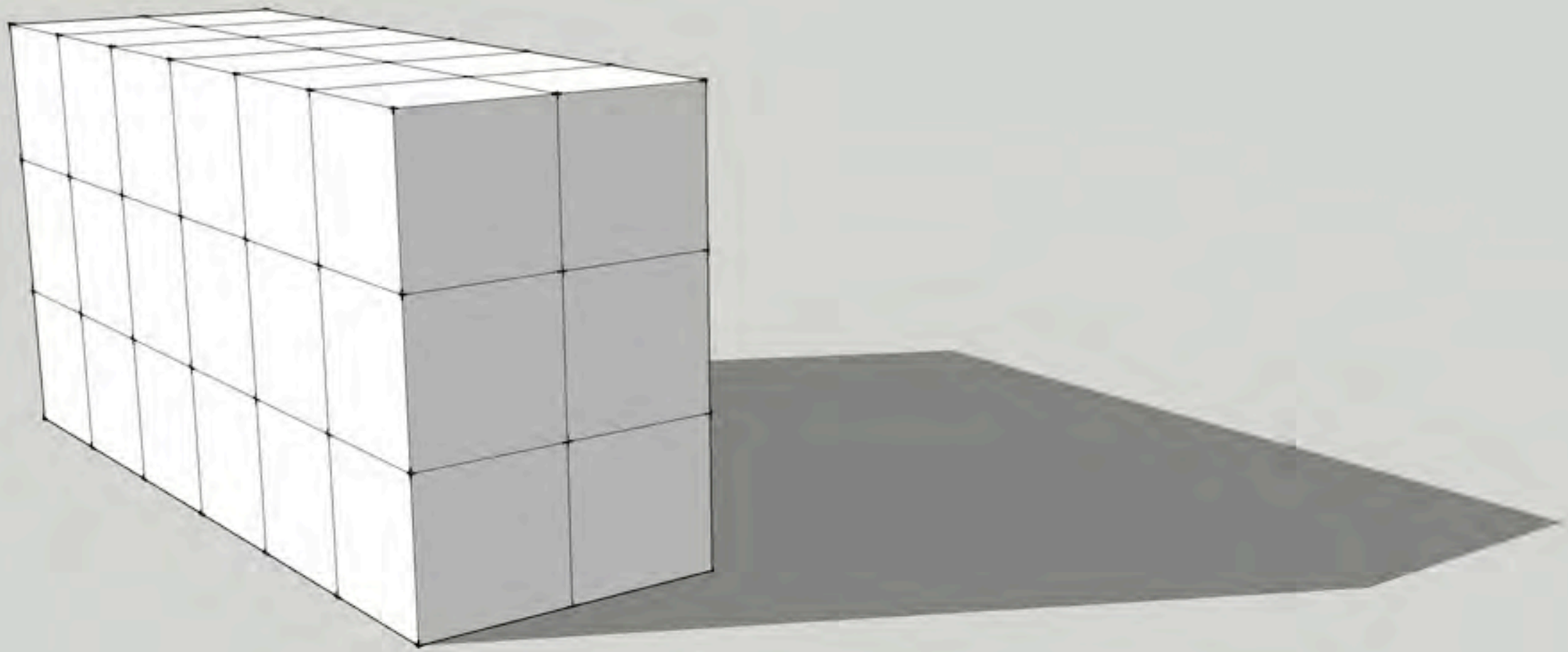
Rational Proportions



Plan Proportions



The Third Dimension



Harmony *with* Natural Processes

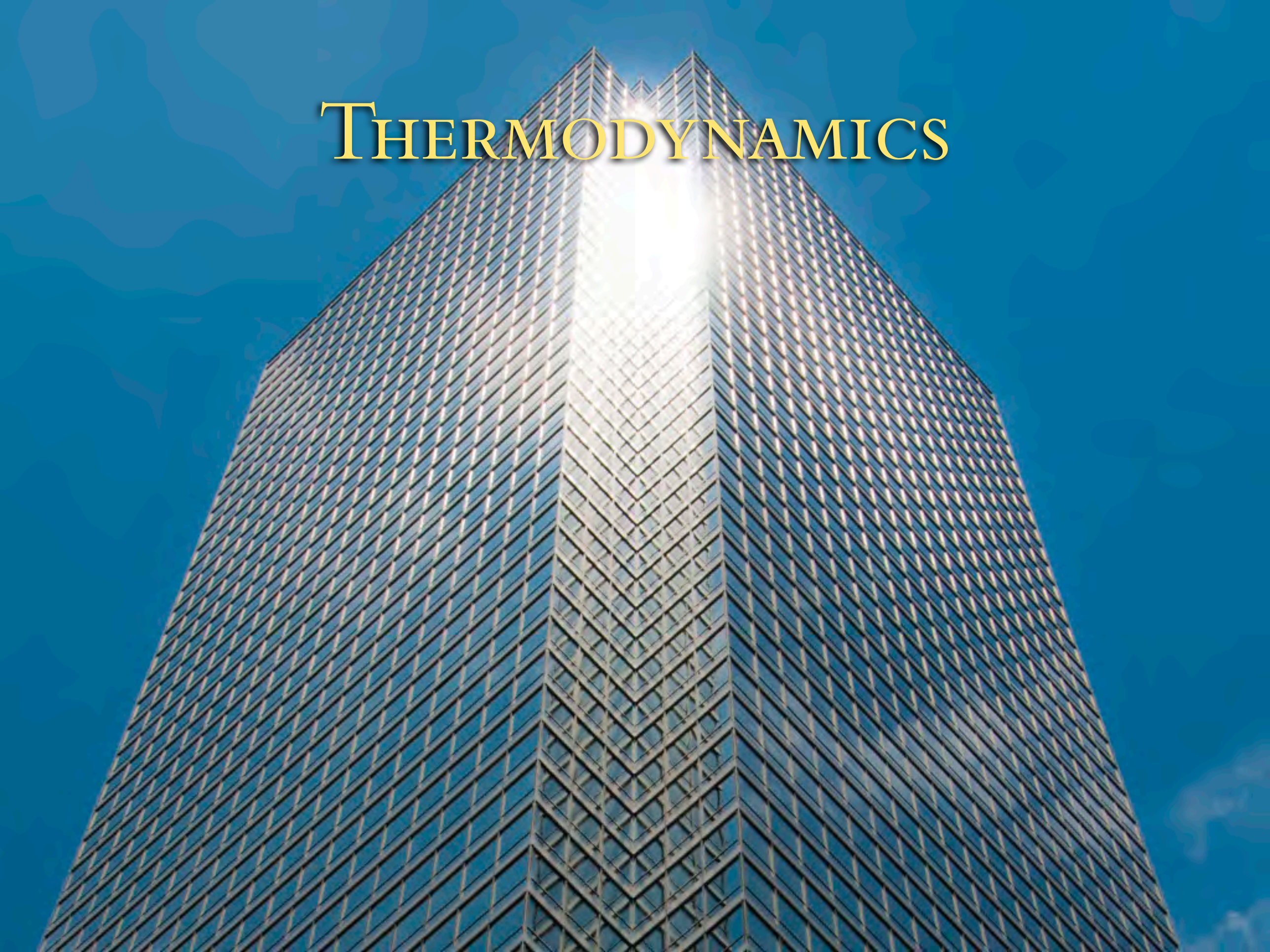
www.originalgreen.org

Harmony *with* Natural Laws

www.originalgreen.org

Gravity

Thermodynamics



Harmony *of* Natural Forms

www.originalgreen.org

Harmony *with the* Region

www.originalgreen.org

Beaufort

Pienza

Ridiculous

Durable Buildings

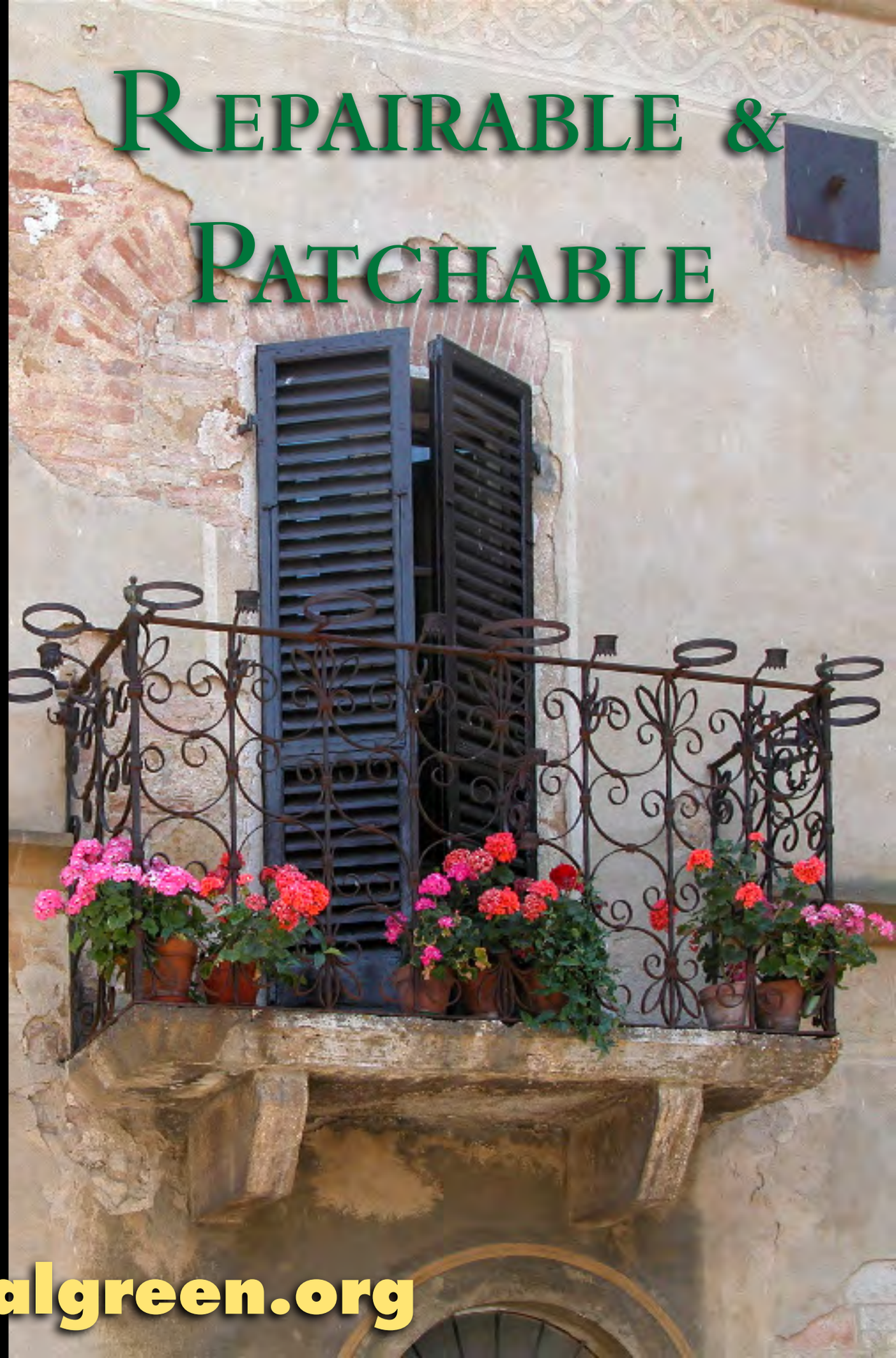
www.originalgreen.org

www.originalgreen.org

Unnaturally Used Materials

Naturally Used Materials

www.originalgreen.org



www.originalgreen.org

Flexible Buildings

www.originalgreen.org

Proximity to Street

www.originalgreen.org

Ceiling Height

www.originalgreen.org

Simplicity of Massing

www.originalgreen.org

Simplicity of Circulation (???)

www.originalgreen.org

Pipes
www.originalgreen.org

Frugal Buildings

www.originalgreen.org

Sustainability *and the* Meltdown

www.originalgreen.org

Be Frugal First
www.originalgreen.org

Then Bridge The Gap

www.originalgreen.org

Putting Buildings Back *to* Work

www.originalgreen.org

The Original Green

PLACES

BUILDINGS

NOURISHABLE LOVABLE

Organic Farming

NU: Codes

Living Traditions

ACCESSIBLE DURABLE

NU: Compact & Walkable

Living Traditions

SERVICEABLE FLEXIBLE

NU: Diverse

Living Traditions

SECURABLE FRUGAL

NU: Identity

Living Traditions

Gizmo Green

What Can I Do?

10. All *the* Other Stuff

9. Don't Succumb *to the* No-Maintenance Myth

8. Choose It *for* Longer Than You'll Use It

7. Smaller *with* Many Uses

6. Choose Community Instead *of* Gates

5. Operate Naturally

4. Raise *a* Victory Garden

3. Build Outdoor Rooms

2. Live Where You Can Walk *to the* Grocery

1. Make *a* Living Where You're Living

www.originalgreen.org

10. Do All *the* Stuff You Already Know

www.originalgreen.org

9. Give *a* Gift *to the* Street

www.originalgreen.org

8. Choose It *for* Longer Than You'll Use It

www.originalgreen.org

7. Choose Smaller Stuff *with* Double Duty

www.originalgreen.org

6. Live Where Friends Visit Unannounced

www.originalgreen.org

5. Operate Naturally

www.originalgreen.org

4. Raise *a* Victory Garden

www.originalgreen.org

3. Build Garden Rooms *in* Your Yard

www.originalgreen.org

2. Live Where You Can Walk *to the* Grocery

www.originalgreen.org

1. Make *a* Living Where You're Living

www.originalgreen.org

Lenses

- ★ Value
- ★ Meaning
- ★ Delight
- ★ Wellness
- ★ Connectedness

www.originalgreen.org

Value

- ★ Usefulness
- ★ Time
- ★ Money

www.originalgreen.org

Value Based *on* Usefulness

- ★ Working
- ★ Learning
- ★ Playing

www.originalgreen.org

Value Based *on* Time

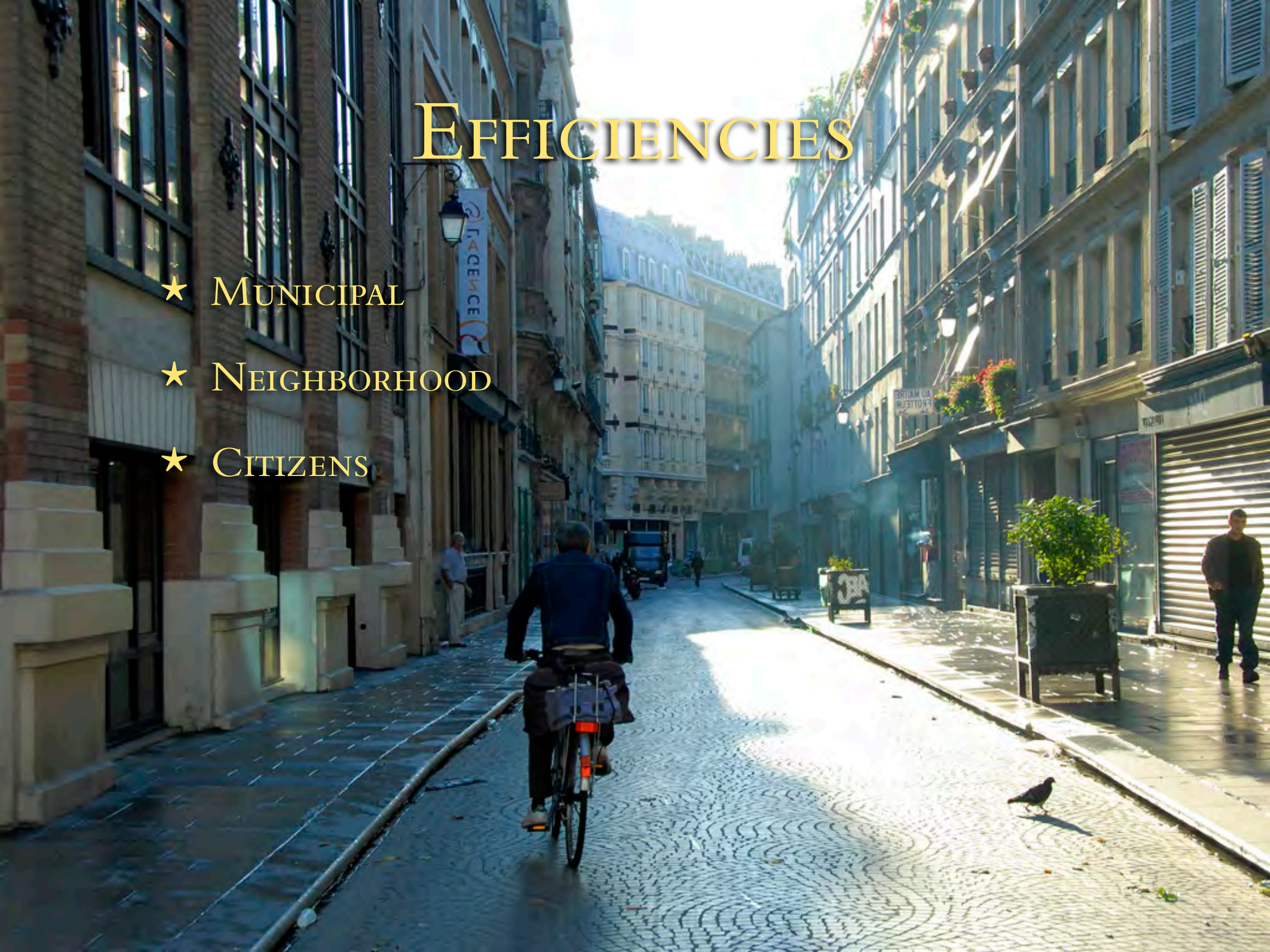
- ★ Time Savings
- ★ Incremental Activities

www.originalgreen.org

Value Based *on* Money

- ★ Current
- ★ Future

www.originalgreen.org



Efficiencies

- ★ Municipal
- ★ Neighborhood
- ★ Citizens

Municipal Utility Use

- ★ More Miles = More Street Lighting
- ★ More Acres = More Irrigation

Municipal Vehicles

- ★ Energy to Operate
- ★ More Miles = More Vehicles
- ★ More Miles = More Employees

Infrastructure

- ★ Municipal & Neighborhood Issues
- ★ Embodied Energy of Materials
- ★ Energy of Installation
- ★ Operational Waste (Leakage & Loss)

Open Space Maintenance

- ★ Municipal & Neighborhood Issues
- ★ Mowing
- ★ Spraying
- ★ Trash Removal
- ★ More Acres = More Equipment
- ★ More Acres = More Employees

Place-Efficient Food

- ★ Municipal
- ★ Neighborhood
- ★ Citizens

Citizen Travel

- ★ Trip Capture (Pedestrian, Bike, & Car)
- ★ Transit Ready

Citizen Services

- ★ Time Savings of Working Nearby
- ★ Energy Savings of Working Nearby
- ★ Single-Crew Workplace Efficiency
- ★ Cooperative Purchasing
- ★ Cooperative Management

Securable Efficiency

- ★ Reduced Cost of Policing
- ★ Reduced Fire Protection Cost

Lovable Efficiency

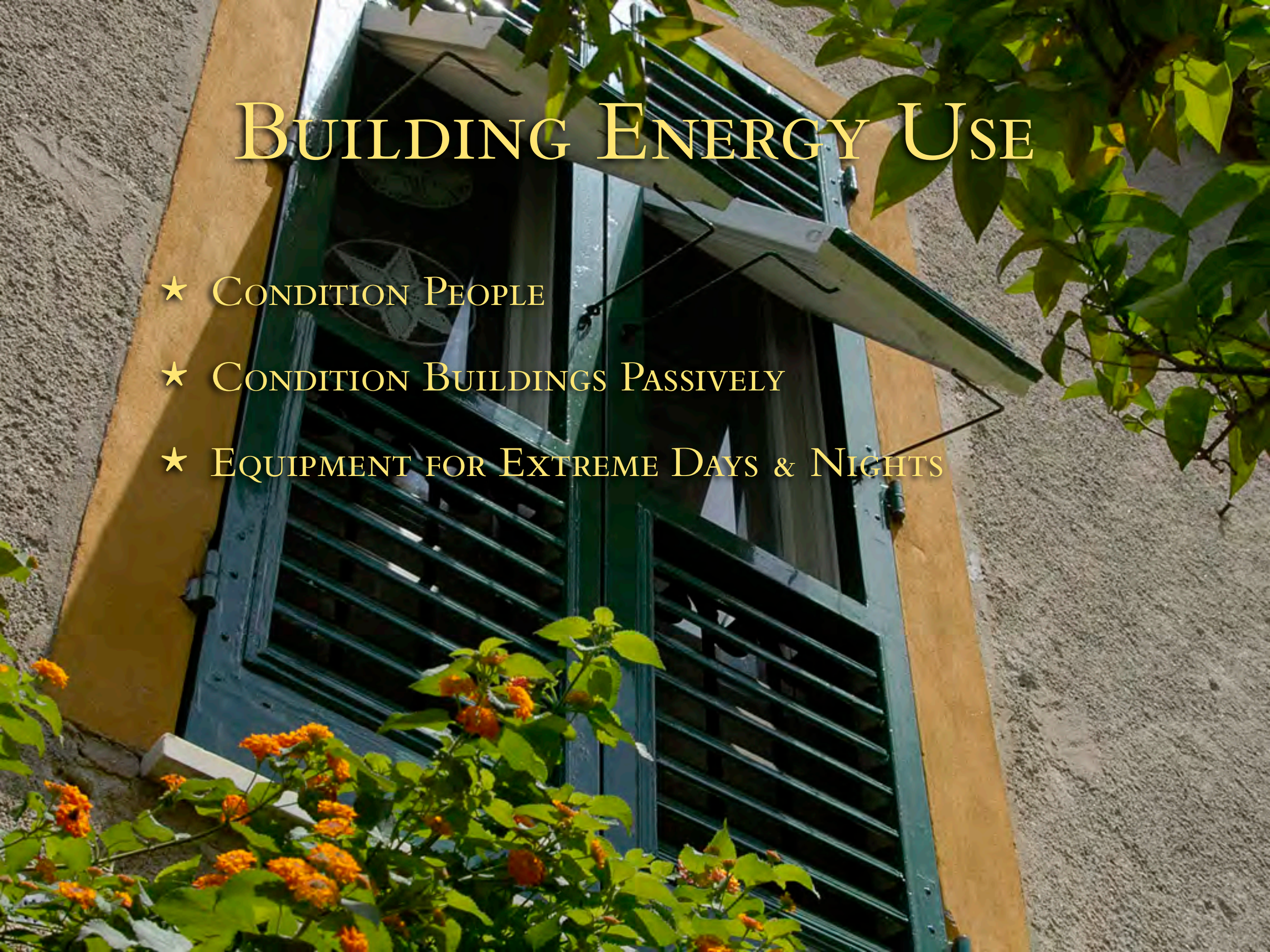
- ★ Energy to Demolish
- ★ Embodied Energy of Materials
- ★ Energy to Construct

Durable Efficiency

- ★ Energy to Demolish
- ★ Embodied Energy of Materials
- ★ Energy to Construct

Flexible Efficiency

- ★ Energy to Demolish
- ★ Embodied Energy of Materials
- ★ Energy to Construct



Building Energy Use

- ★ Condition People
- ★ Condition Buildings Passively
- ★ Equipment for Extreme Days & Nights

Living Traditions *through the* Lens *of* Value *based on* Money

www.originalgreen.org

The Toggle Switch

www.originalgreen.org

Tear-Out Prevention Seminar

www.originalgreen.org

www.originalgreen.org

Builders' Workshops

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

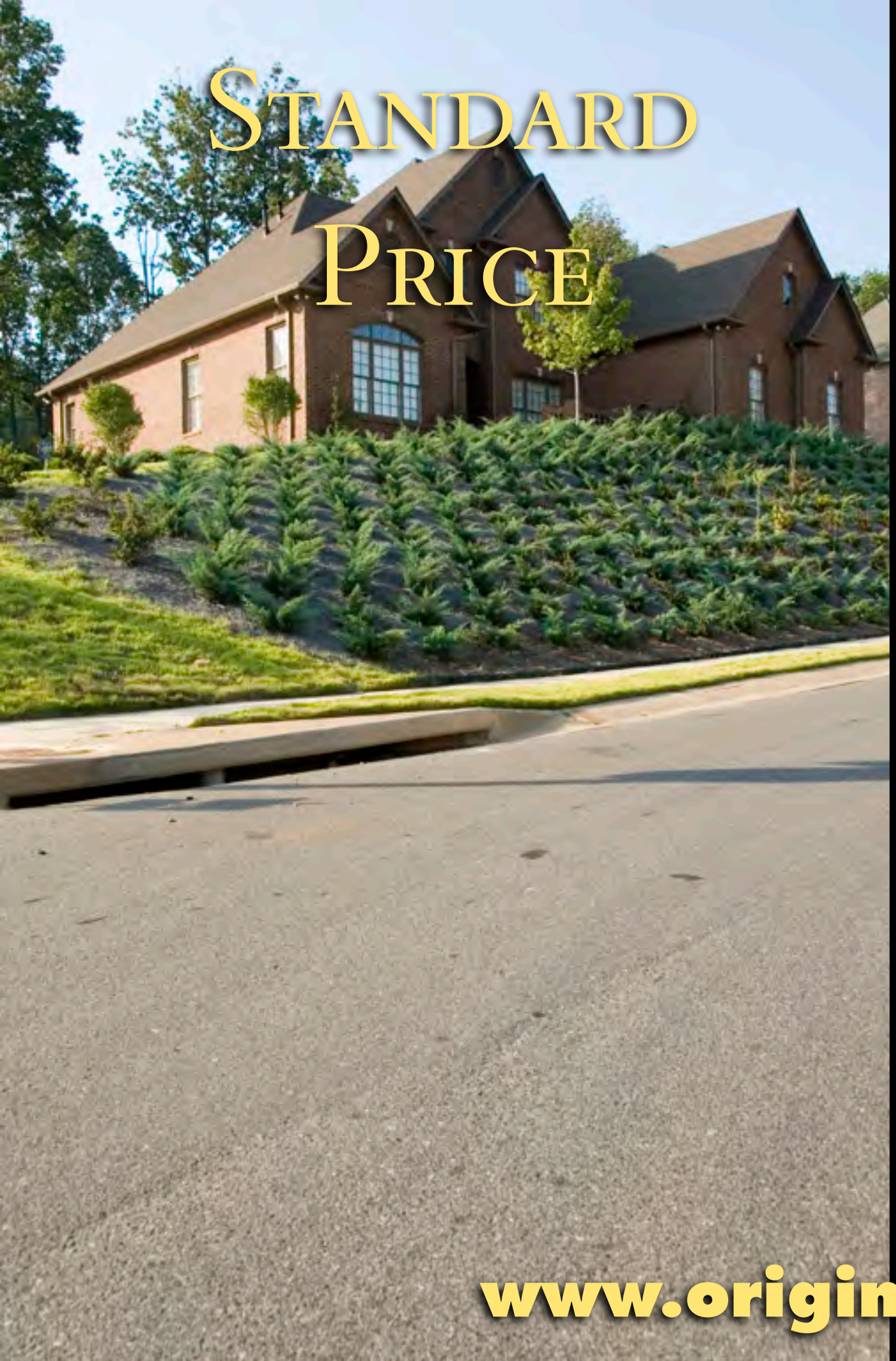
www.originalgreen.org

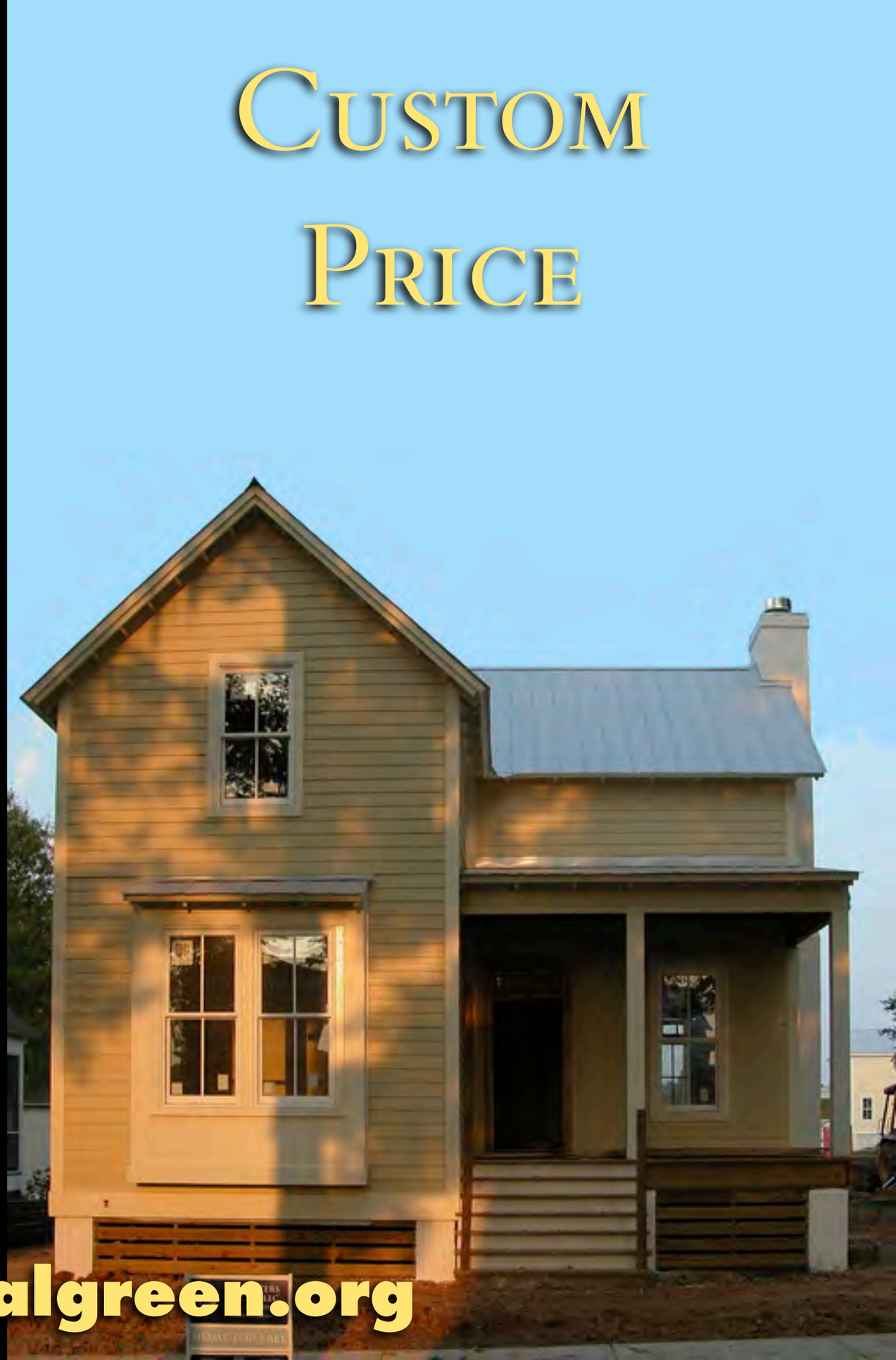
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

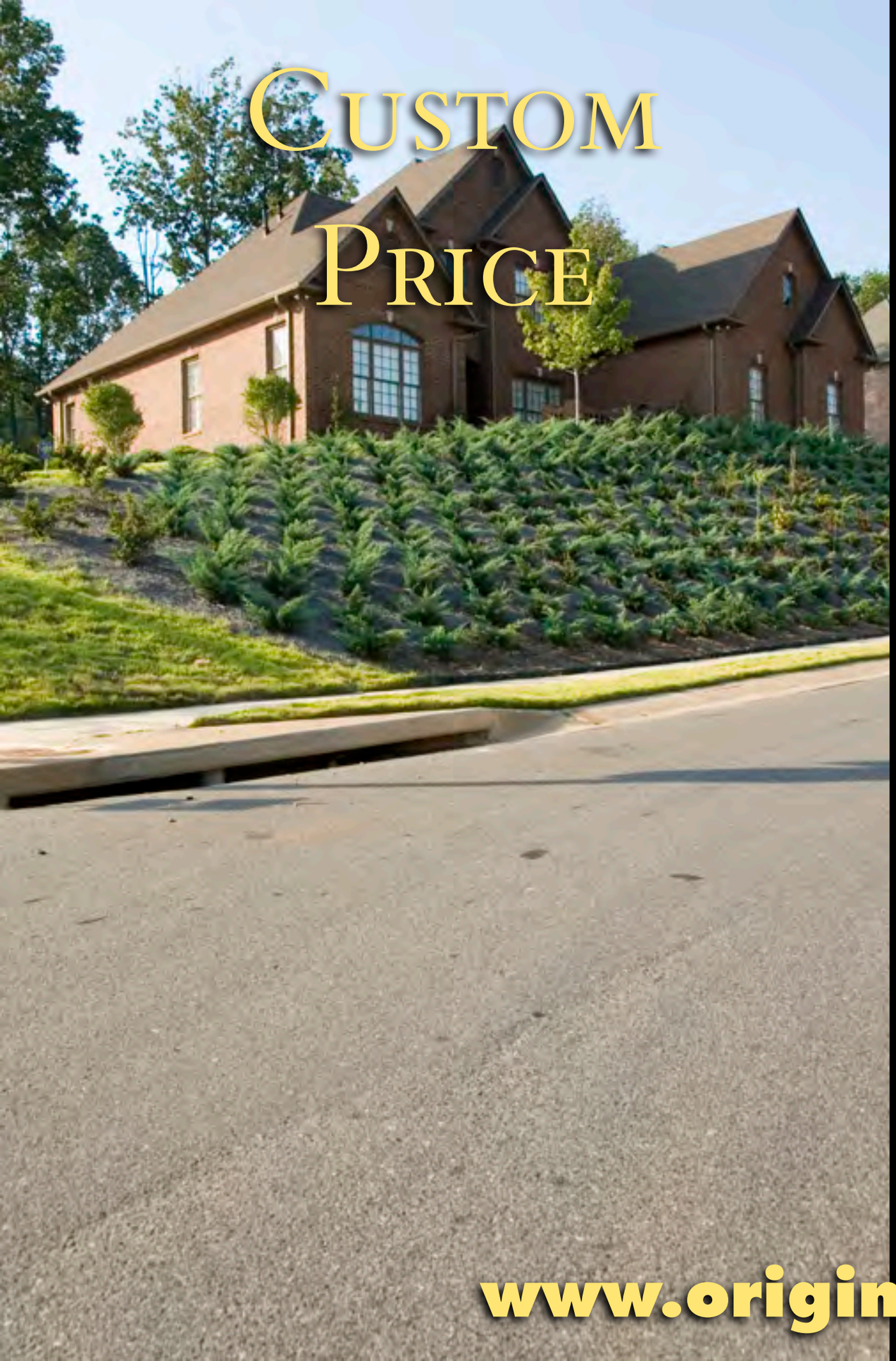


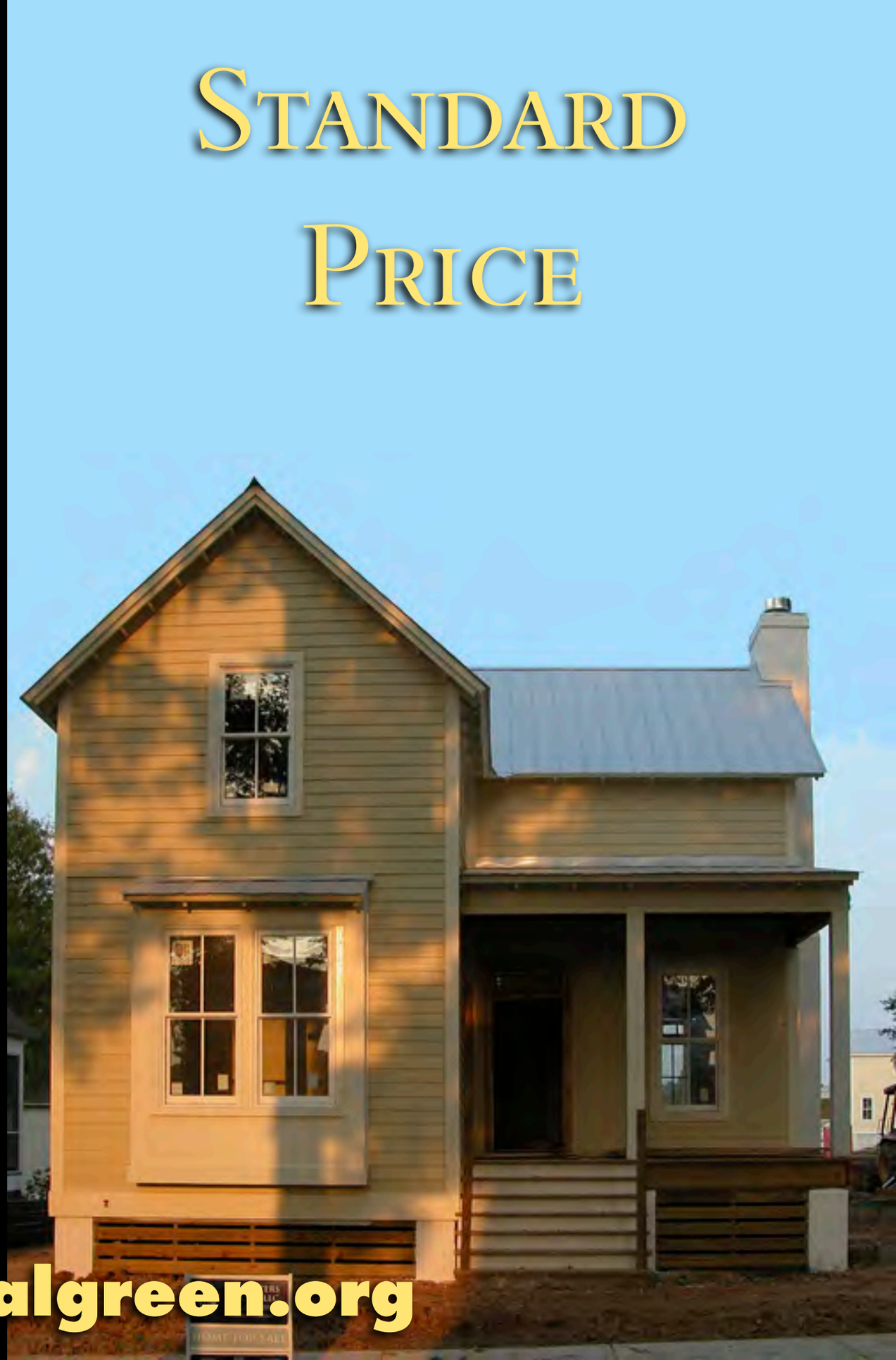


www.originalgreen.org

Custom Price

Standard Price





www.originalgreen.org

Nourishable Places *through the* Lens *of* Value *based on* Money

- ★ Operating *at* Great Distance = At Risk *of* Anything In Between
- ★ Arrival *of* Peak Oil

www.originalgreen.org

Food Security?

- ★ Exchange Rates
- ★ Political Issues
- ★ Agribusiness

www.originalgreen.org

Industrial Economics Require Bad-Neighbor Agriculture

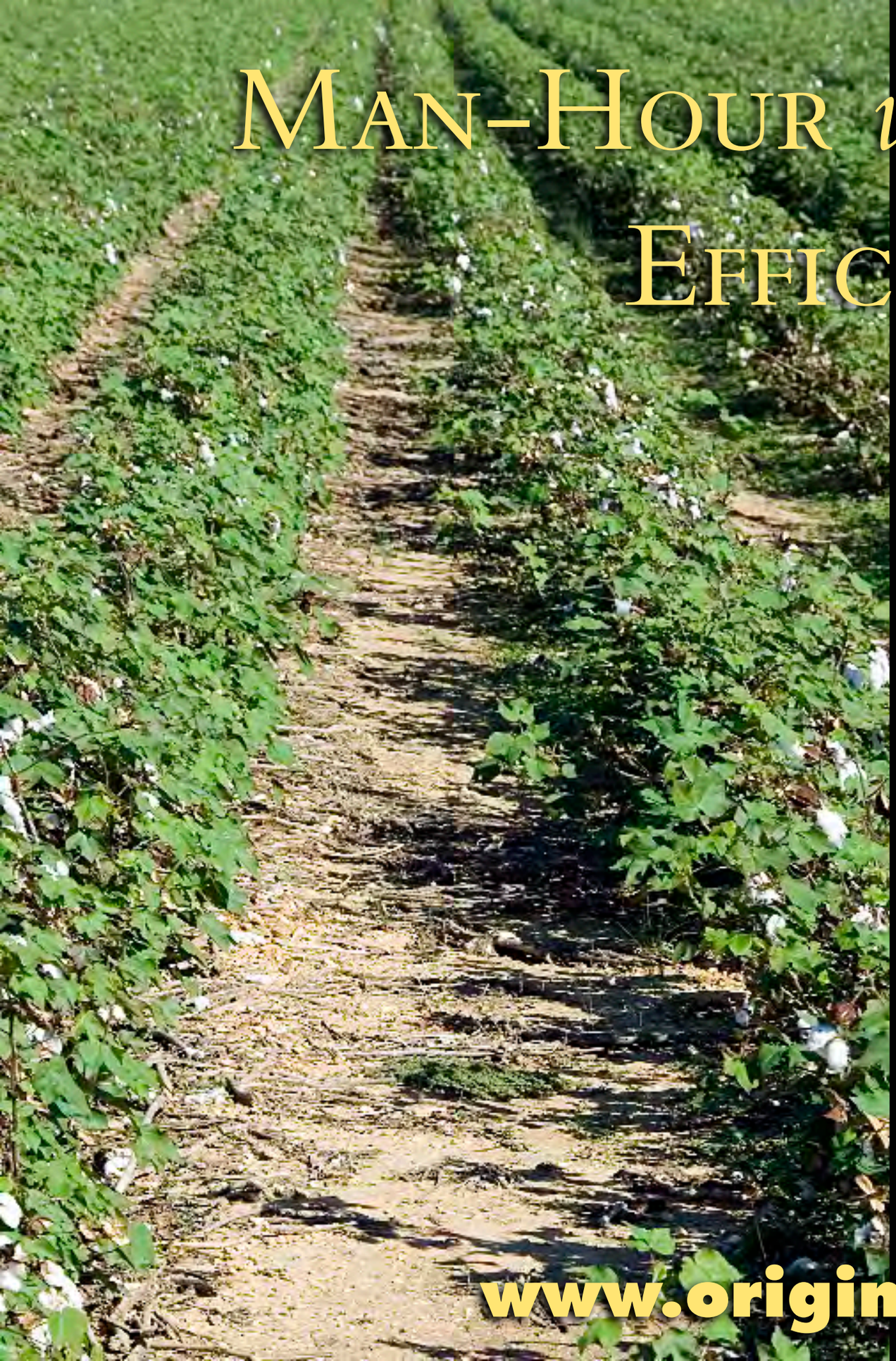
- ★ Chemical Fertilizer
- ★ Crop-Dusting
- ★ Fouled Runoff
- ★ CAFO

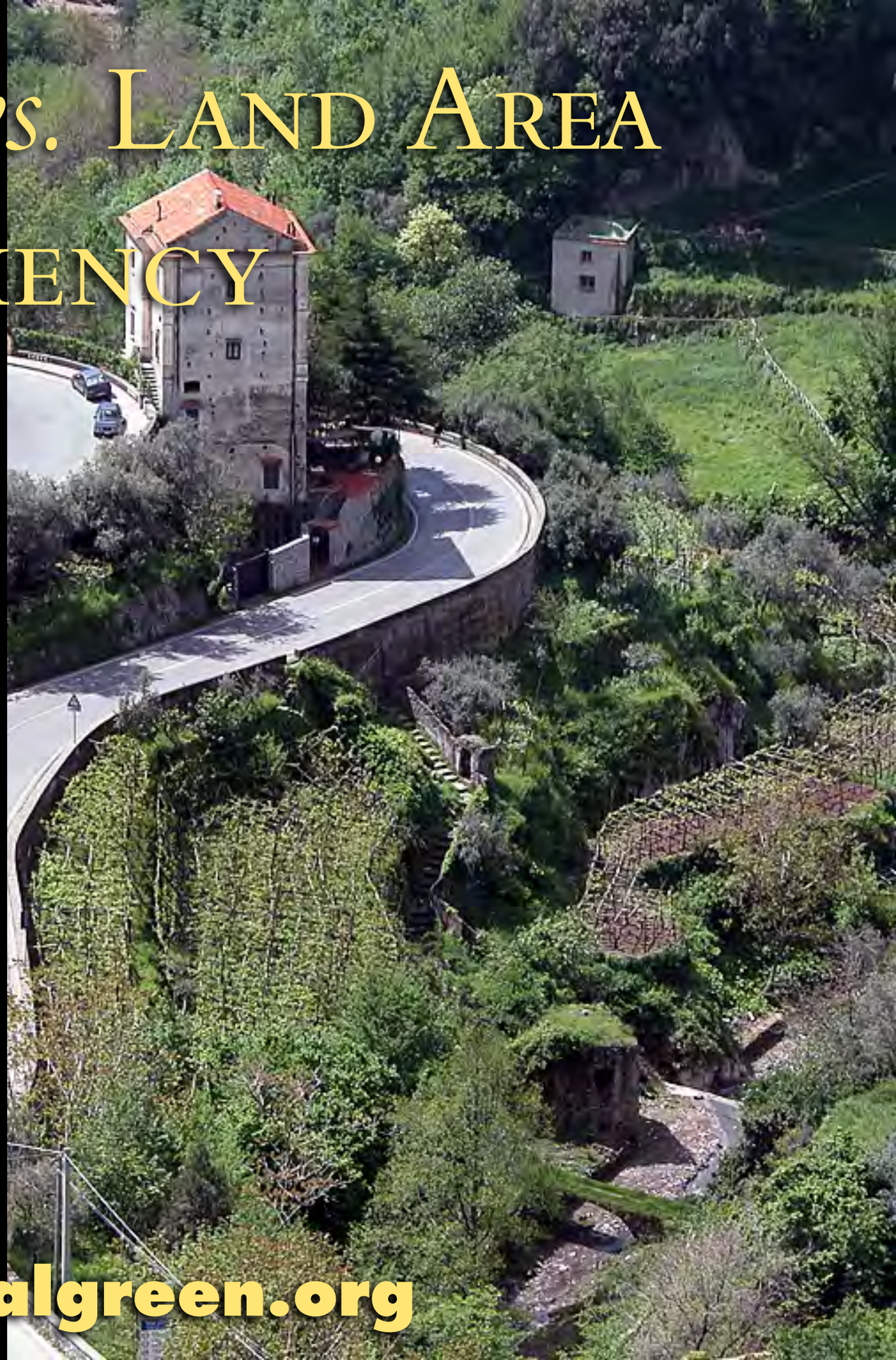
www.originalgreen.org

Good-Neighbor Agriculture

www.originalgreen.org

Man-Hour *vs.* Land Area Efficiency





www.originalgreen.org

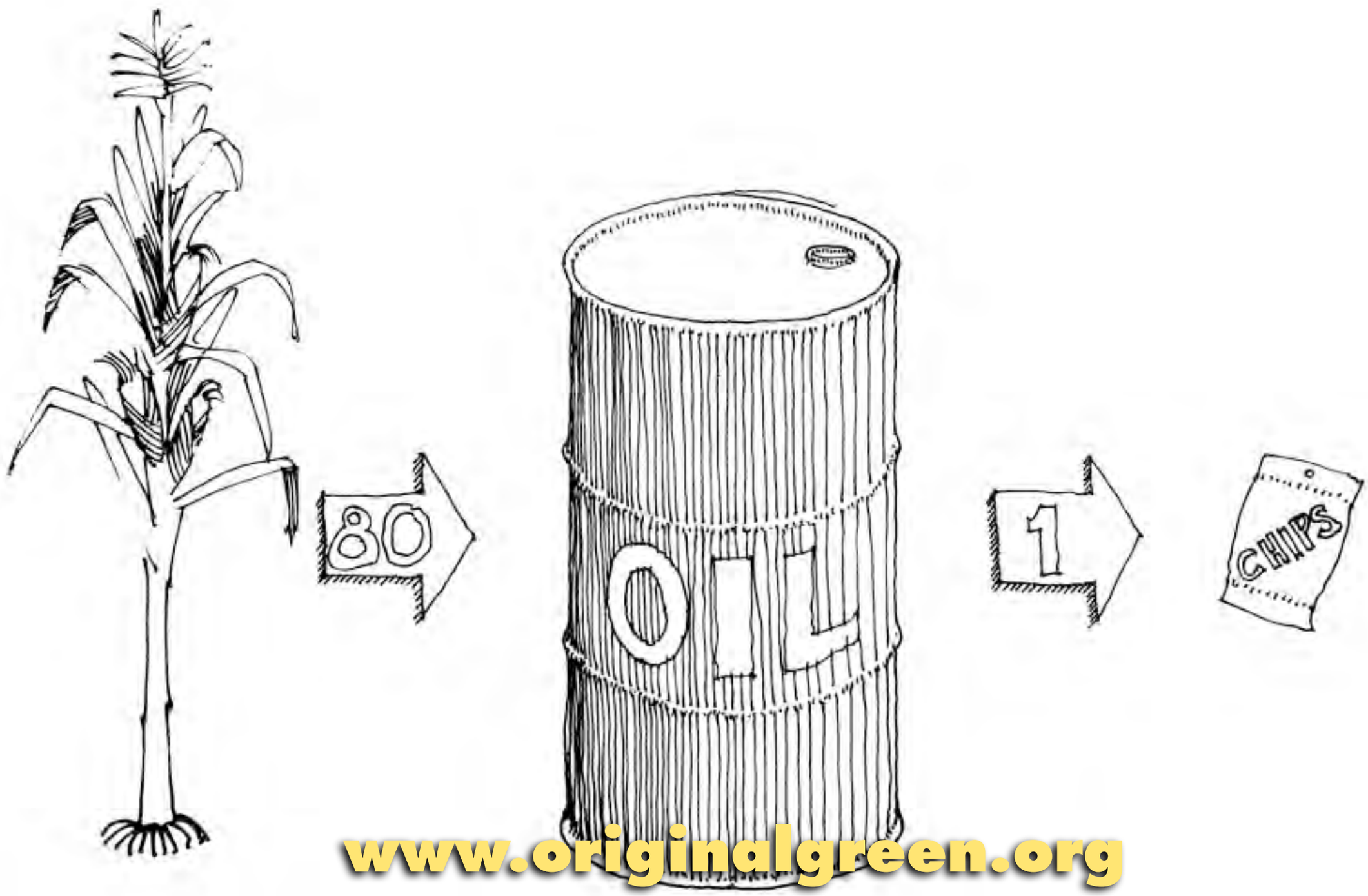
Efficiency *of the* Farmer *on a* Tractor?

www.originalgreen.org

What's Being Forgotten

www.originalgreen.org

Calorie Inefficiency



www.originalgreen.org

Exporting *the* Guilt

www.originalgreen.org

www.originalgreen.org

Accessible Places *through the* Lens *of* Value *based on* Time

www.originalgreen.org

90
DJA 9023
www.originalgreen.org

Accessible Places *through the* Lens *of* Value *based on* Money

- ★ Economic Benefits *of* Better Health *in* Accessible Places
- ★ Fitness Alfresco in Accessible Places

www.originalgreen.org

Automobile Poverty

www.originalgreen.org

Cheapway

★ An American thoroughfare formerly known as the freeway that, while it may cost billions of dollars to construct, nonetheless destroys more adjacent real estate value in cities in which it is built than it costs to build in the first place.

www.originalgreen.org

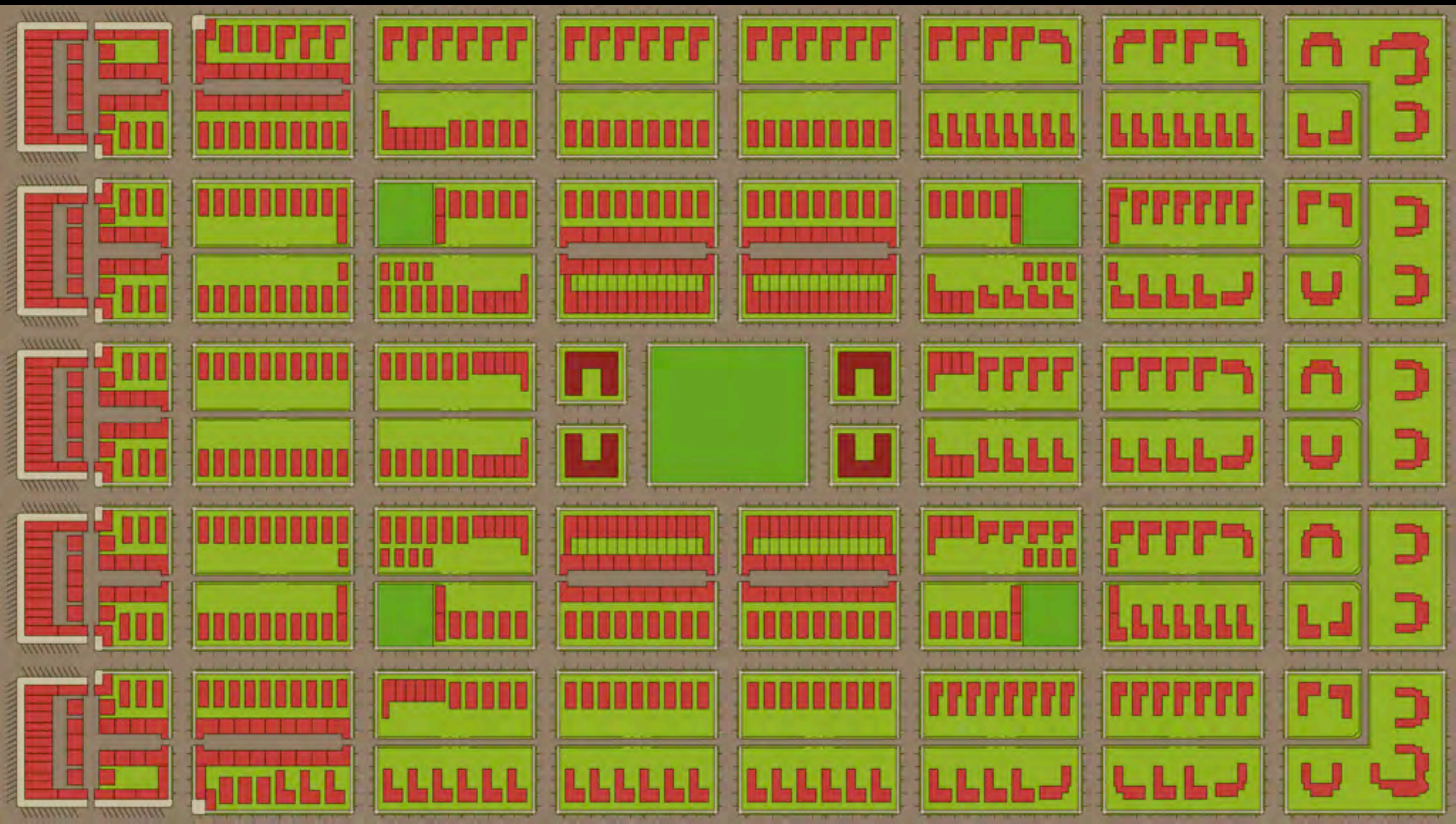
Norquist's Law

★ Public infrastructure expenditure per square foot of developed space is inversely proportional to your ability to walk to lunch

www.originalgreen.org

Subdivision

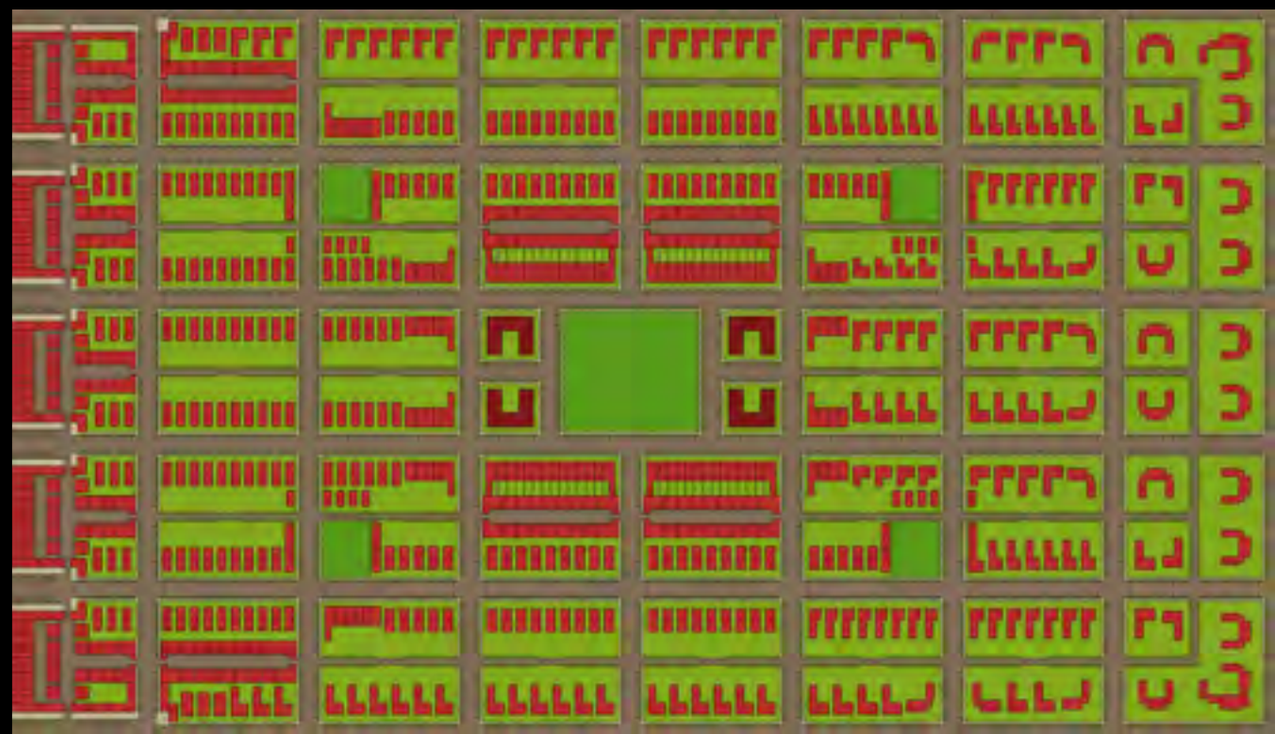
TND



Metrics

- ★ 90 acres
- ★ 114 units
- ★ no shops or offices

- ★ 90 acres
- ★ 814 units
- ★ 99.27 sf/unit shops & offices



Civic Spaces & Buildings

- ★ none

- ★ 1 square
- ★ 4 pocket parks/playgrounds
- ★ 2.63 acres = 140 sf/unit

Major Thoroughfares

- ★ arterial: 13.3'/unit (creates no real estate value)
- ★ main street: none

- ★ arterial: none
- ★ main street: 2.13'/unit (creates high real estate value)

Minor Thoroughfares

- ★ locals: 101.4'/unit = 3,650 SF of paving/unit @ typical sprawl width of 36', but includes no parking
- ★ streets: 28.03'/unit = 953 SF of paving/unit, and includes 2.02 guest spaces of parking on-street

Service Thoroughfares

- ★ driveways: average 108'/unit
- ★ paving area: 1,296 SF/unit

- ★ alleys: 4.45'/unit
- ★ rear lanes: 10.2'/unit
- ★ driveways: 9'/unit
- ★ paving area: 454 SF/unit

Public Safety

- ★ protect 46 units per mile traveled
- ★ front access only

- ★ protect 175 units per mile traveled
- ★ alleys & rear lanes provide secondary access

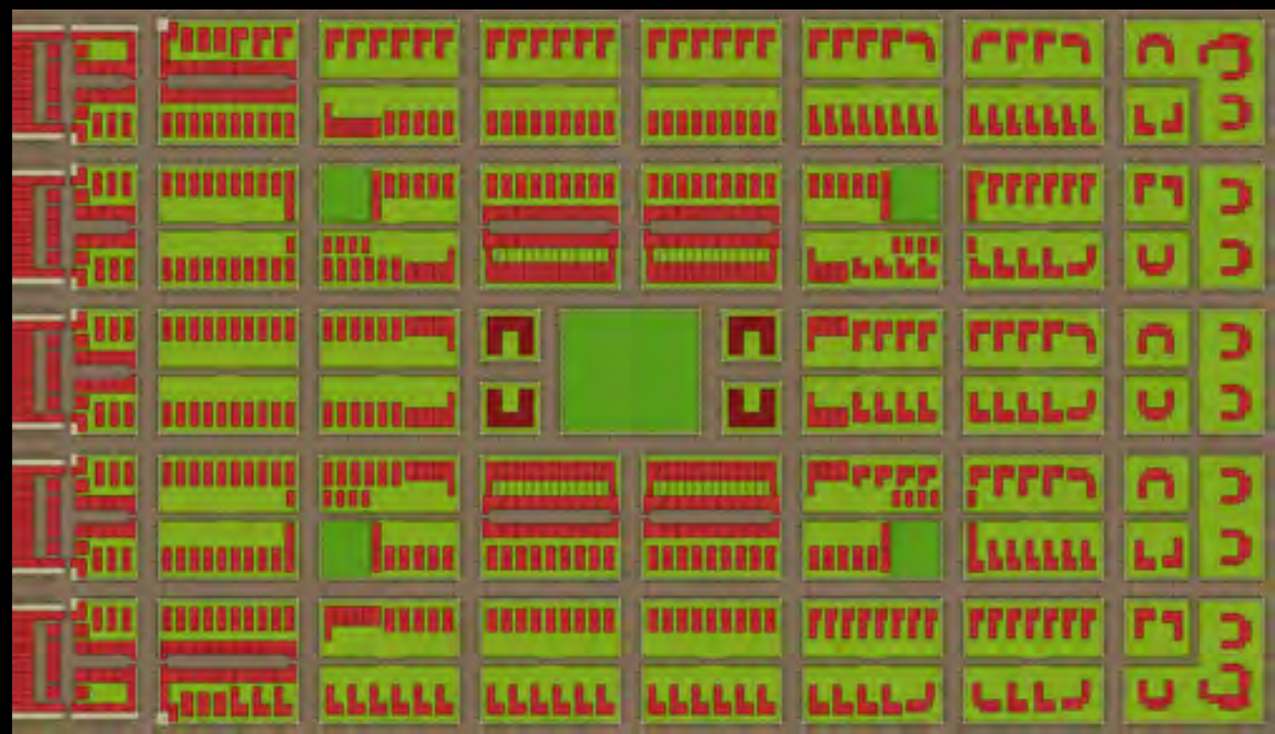
Infrastructure

- ★ 114.7' of utilities per unit
- ★ 30.16' of utilities per unit

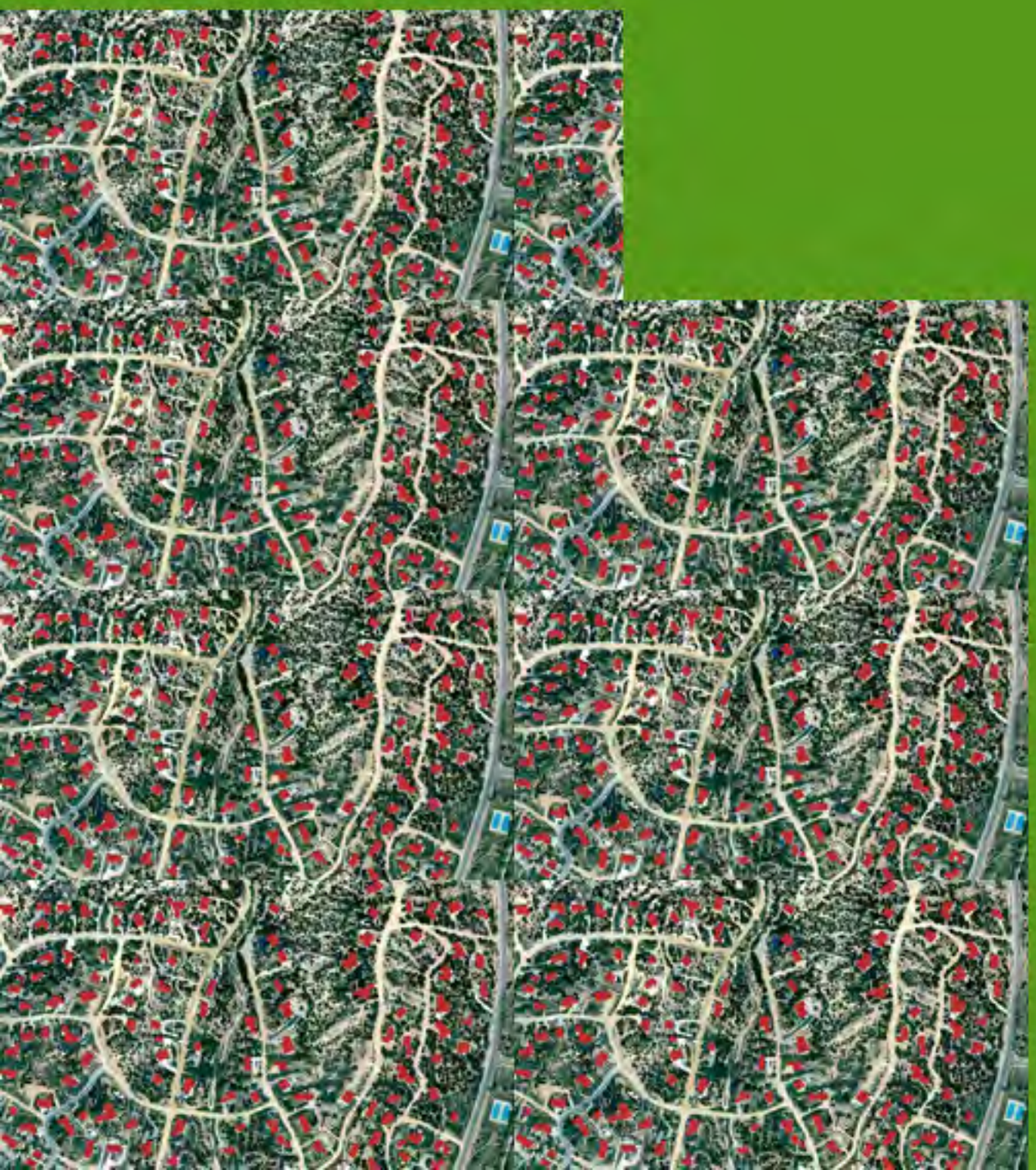
Traffic

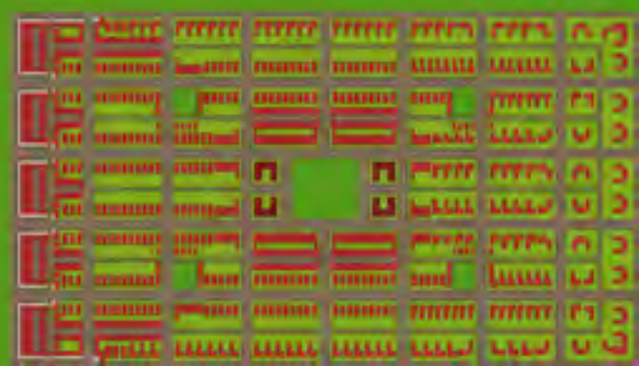
- ★ full load miles
- ★ cars: 89.9% of trips
- ★ full load trips

- ★ 18 less miles/day/house
- ★ cars: 78.4% of trips
- ★ 1.53 fewer external trips/day



Land Preservation





Serviceable Places *through the* Lens *of* Value *based on* Time

- ★ Time Lost Getting Services *in* Sprawl
- ★ "Every time you do something different, you've gotta drive."

www.originalgreen.org

Serviceable Places *through the* Lens *of* Value *based on* Money

★ Fallacy *of* Super-Sizing

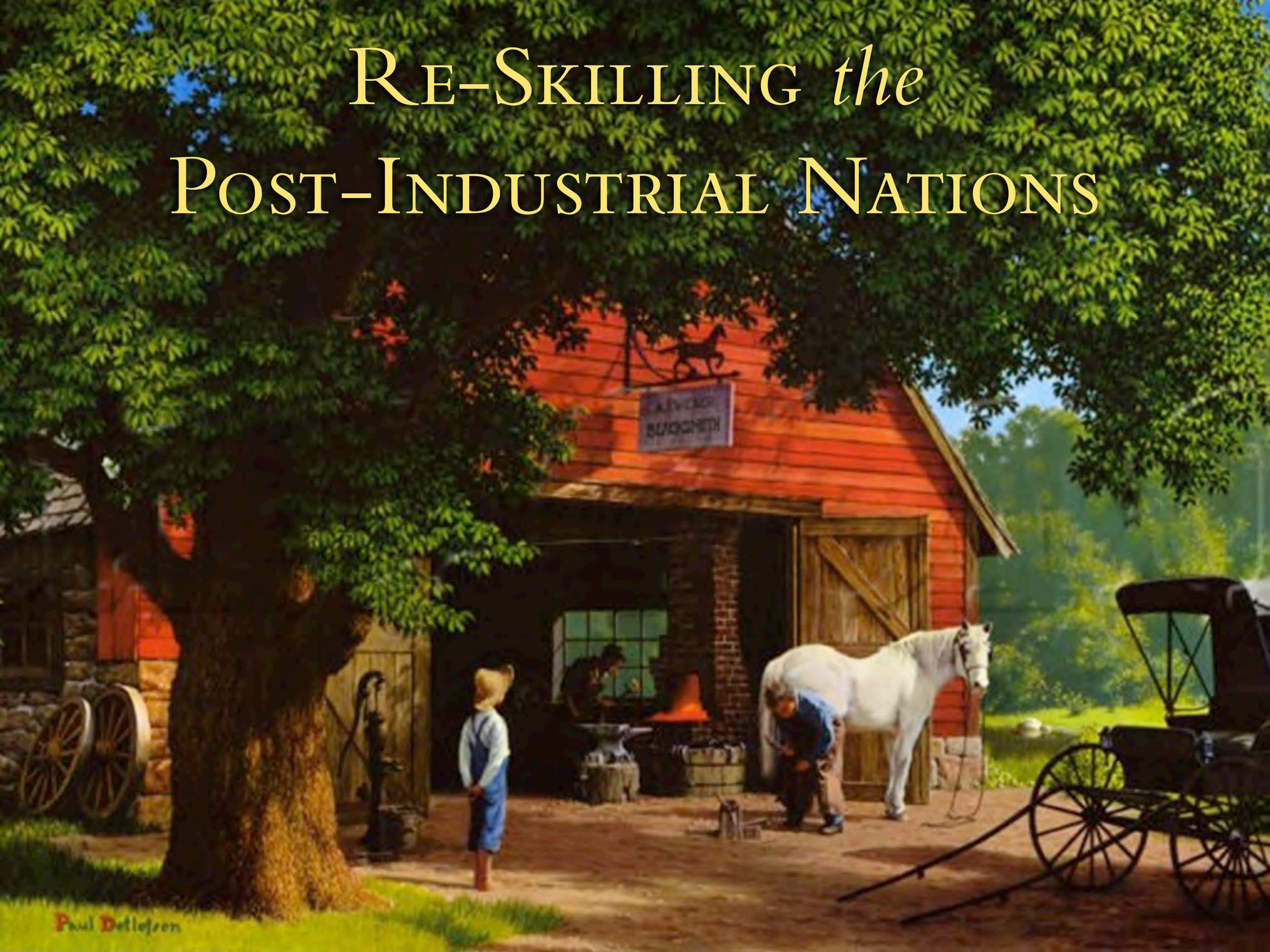
www.originalgreen.org

Serviceability Principles

- ★ Make A Living Where You're Living
- ★ Single-Crew Workplaces
- ★ Telecommute
- ★ Start Your Business
- ★ Corporate Village

www.originalgreen.org

Re-Skilling *the* Post-Industrial Nations



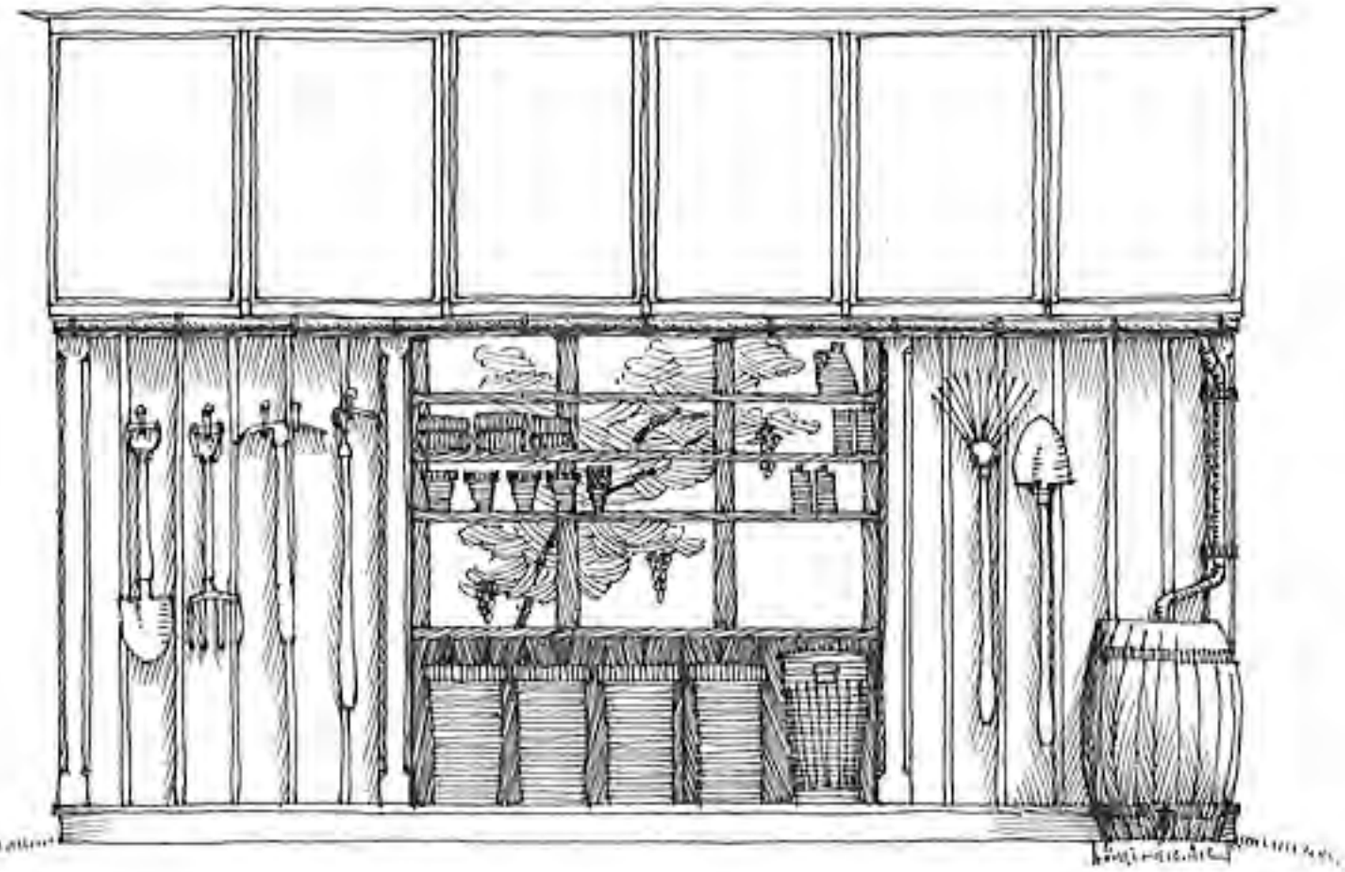
Serviceable Places *through the* Lens *of* Value *based on* Money

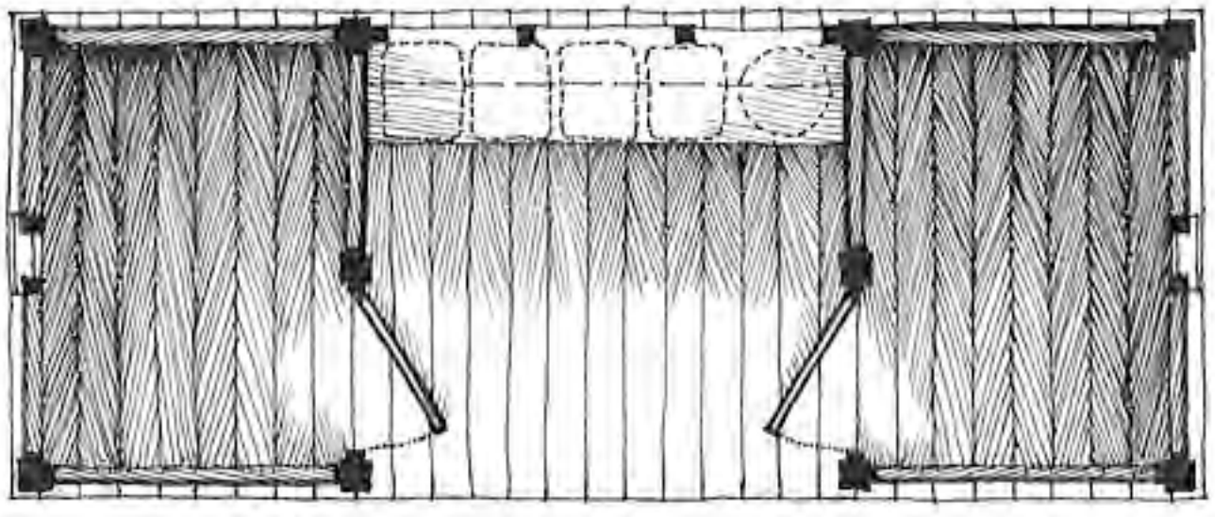
- ★ Value in Tough Times
- ★ When the Subdivisions Tip
- ★ Smaller *is* More Securable
- ★ Ceasing Services: Where?

www.originalgreen.org

Lovable Buildings *through the* Lens *of* Value *based on* Usefulness

www.originalgreen.org





www.originalgreen.org

Lovable Buildings *through the* Lens *of* Value *based on* Time

www.originalgreen.org

Down *the* Unlovable Carbon Stair-Steps

www.originalgreen.org

Current Methods

- ★ Resident Town Architect
- ★ Multiple Architect Review Committee
- ★ Remote Reviews
- ★ "Canned" Face-To-Face
- ★ Interactive Face-To-Face

www.originalgreen.org

Lovable Buildings *through the* Lens *of* Value *based on* Money

- ★ Enduring Value *of* Lovability: Carrying Value Deep *into an* Uncertain Future
- ★ Past Your Children's Rejection
- ★ Sacrifice *for* Love

www.originalgreen.org

Durable Buildings *through the* Lens *of* Value *based on* Money

★ 1,000 Year Life Cycle Cost: 15% @ 50% Over

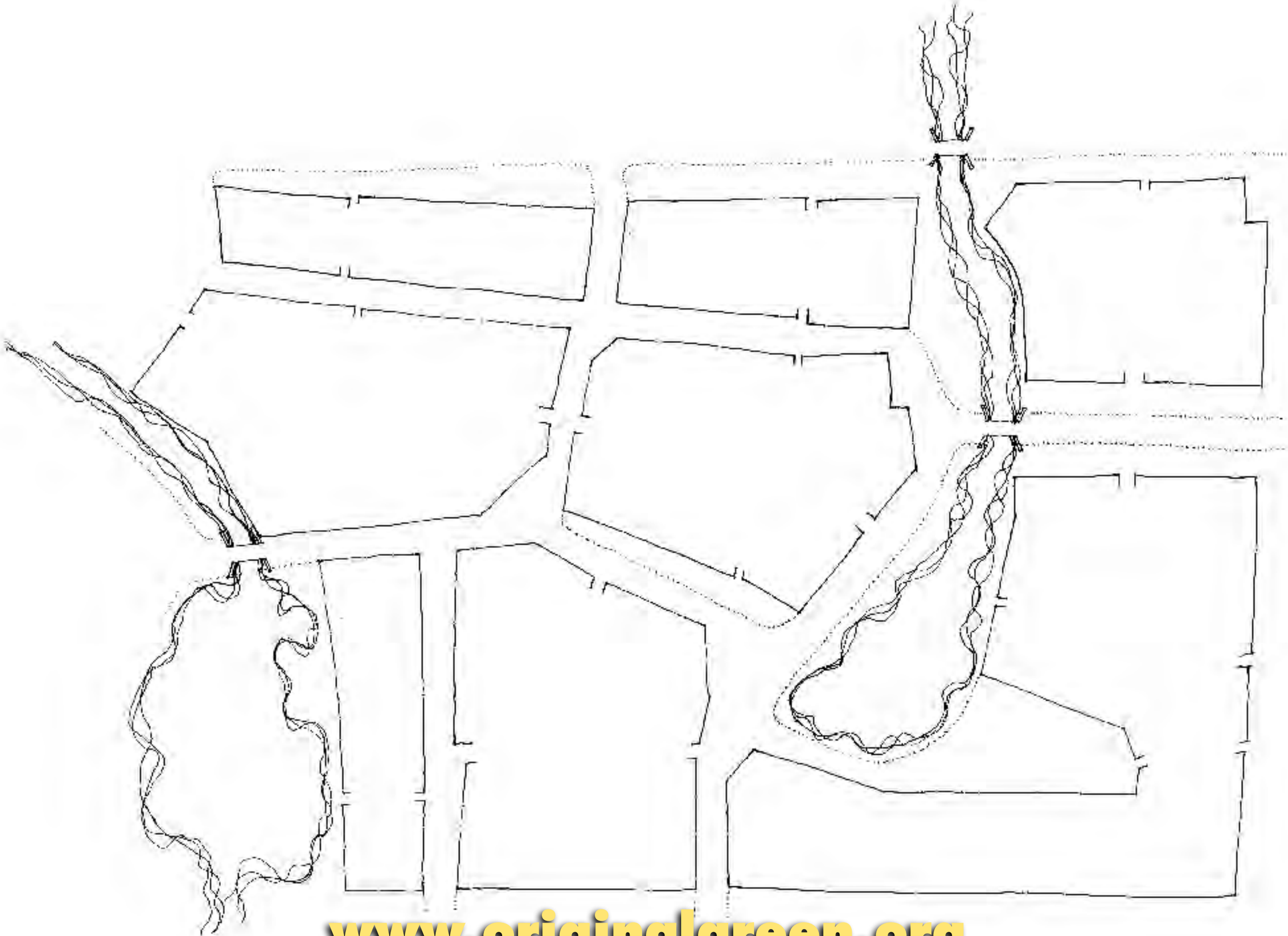
www.originalgreen.org

Frugal Buildings *through the* Lens *of* Value *based on* Time

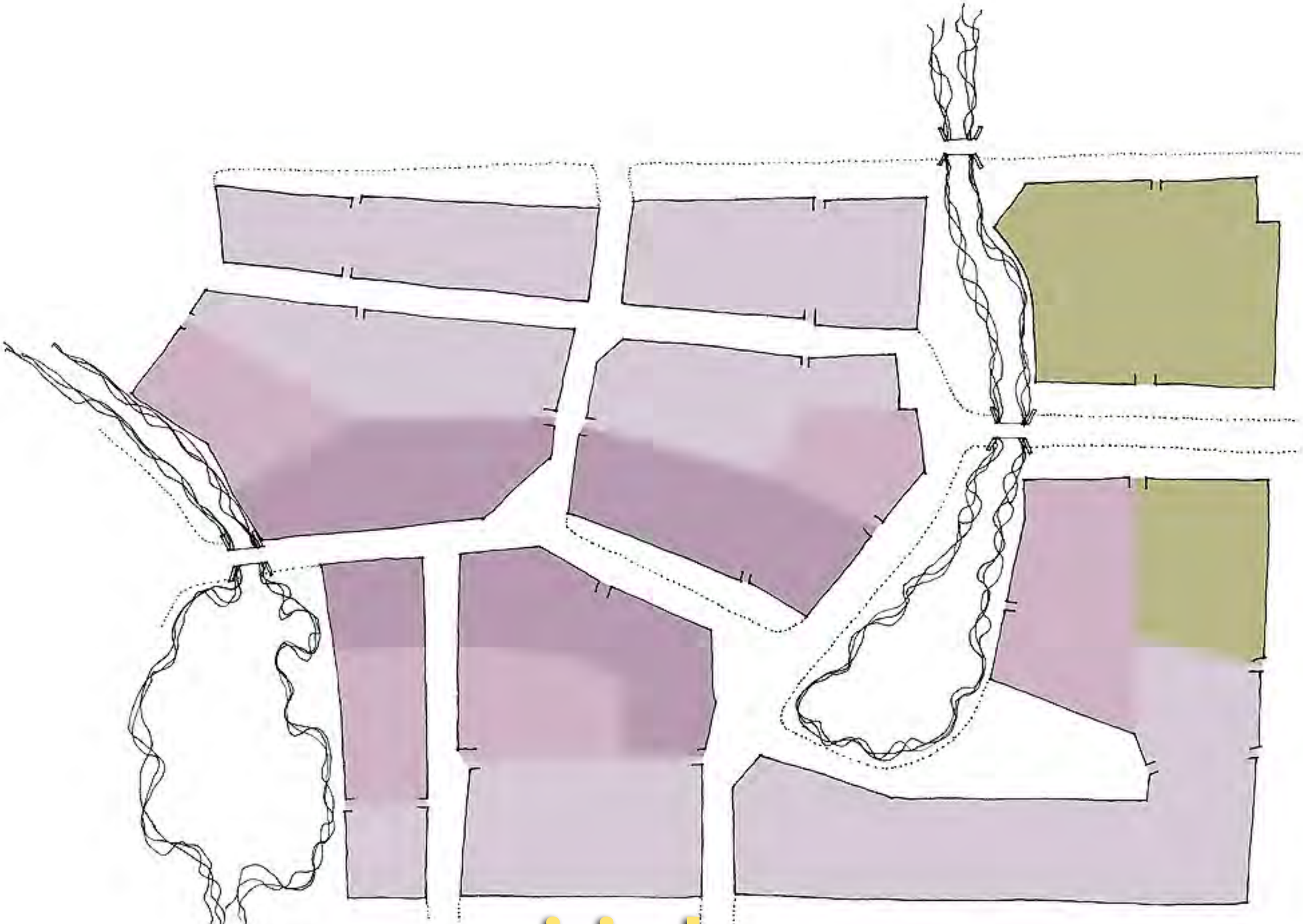
www.originalgreen.org

The Sky Method

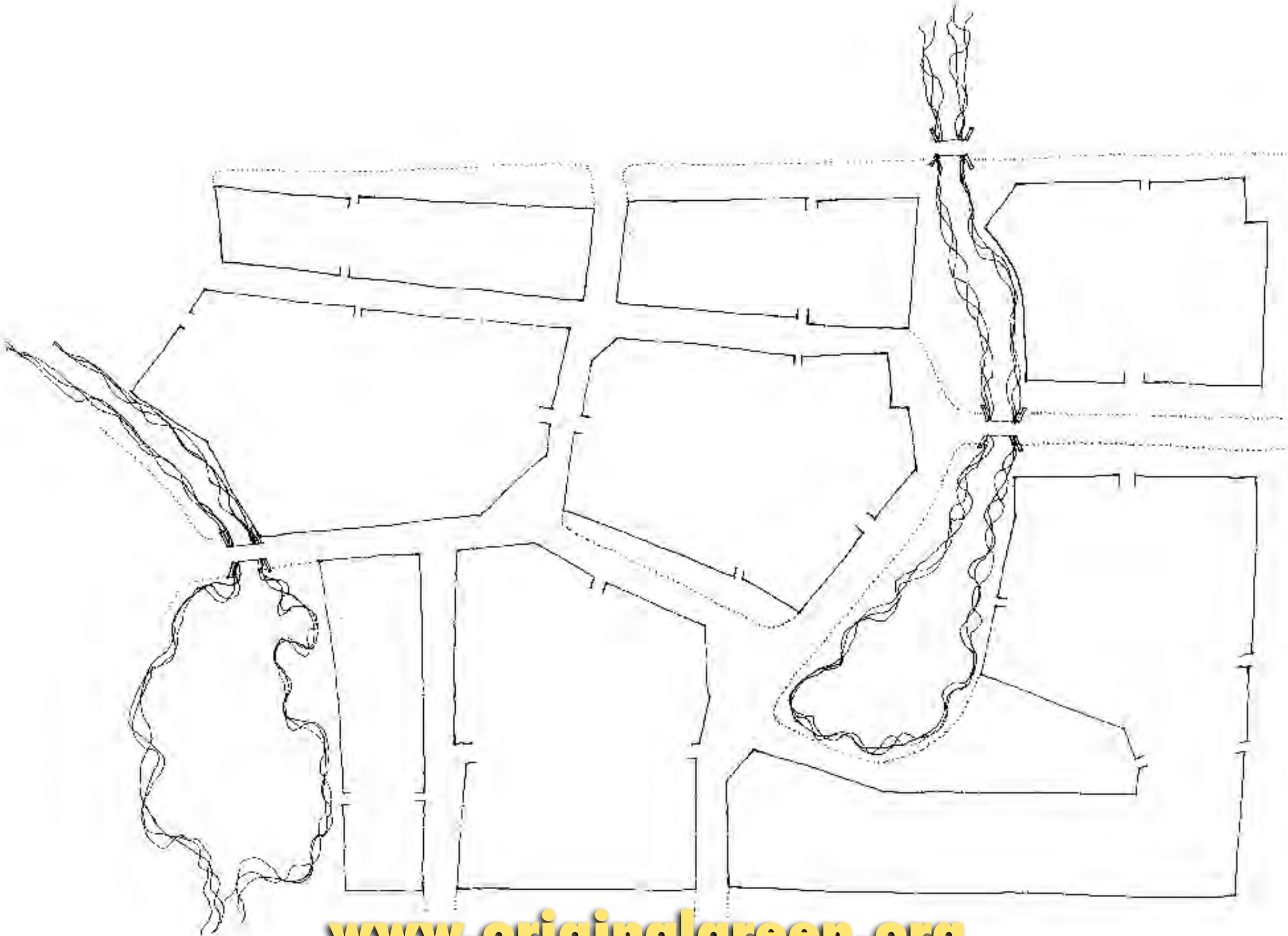
www.originalgreen.org



www.originalgreen.org



www.originalgreen.org



www.originalgreen.org

www.originalgreen.org

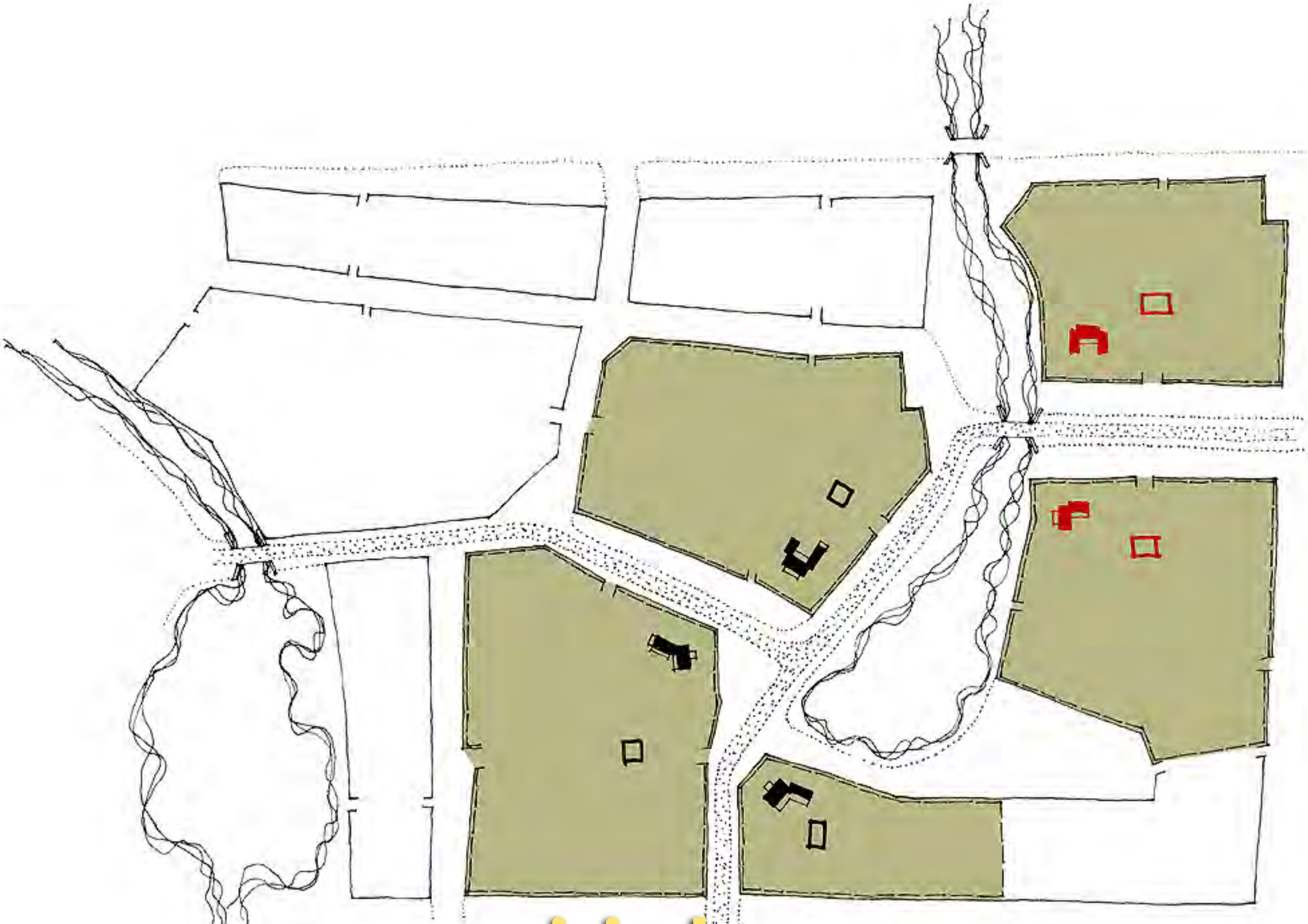
www.originalgreen.org

www.originalgreen.org

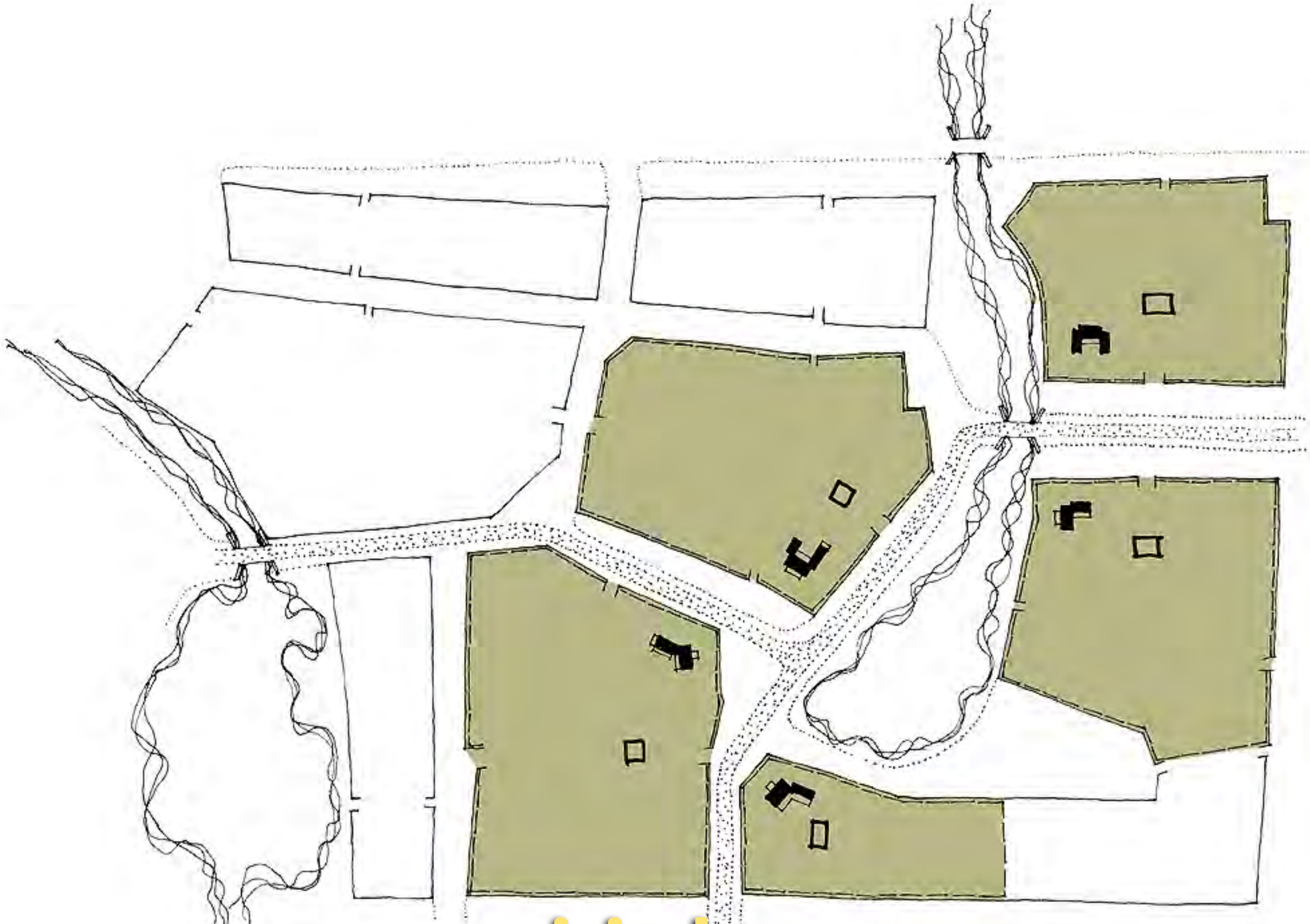
www.originalgreen.org

www.originalgreen.org

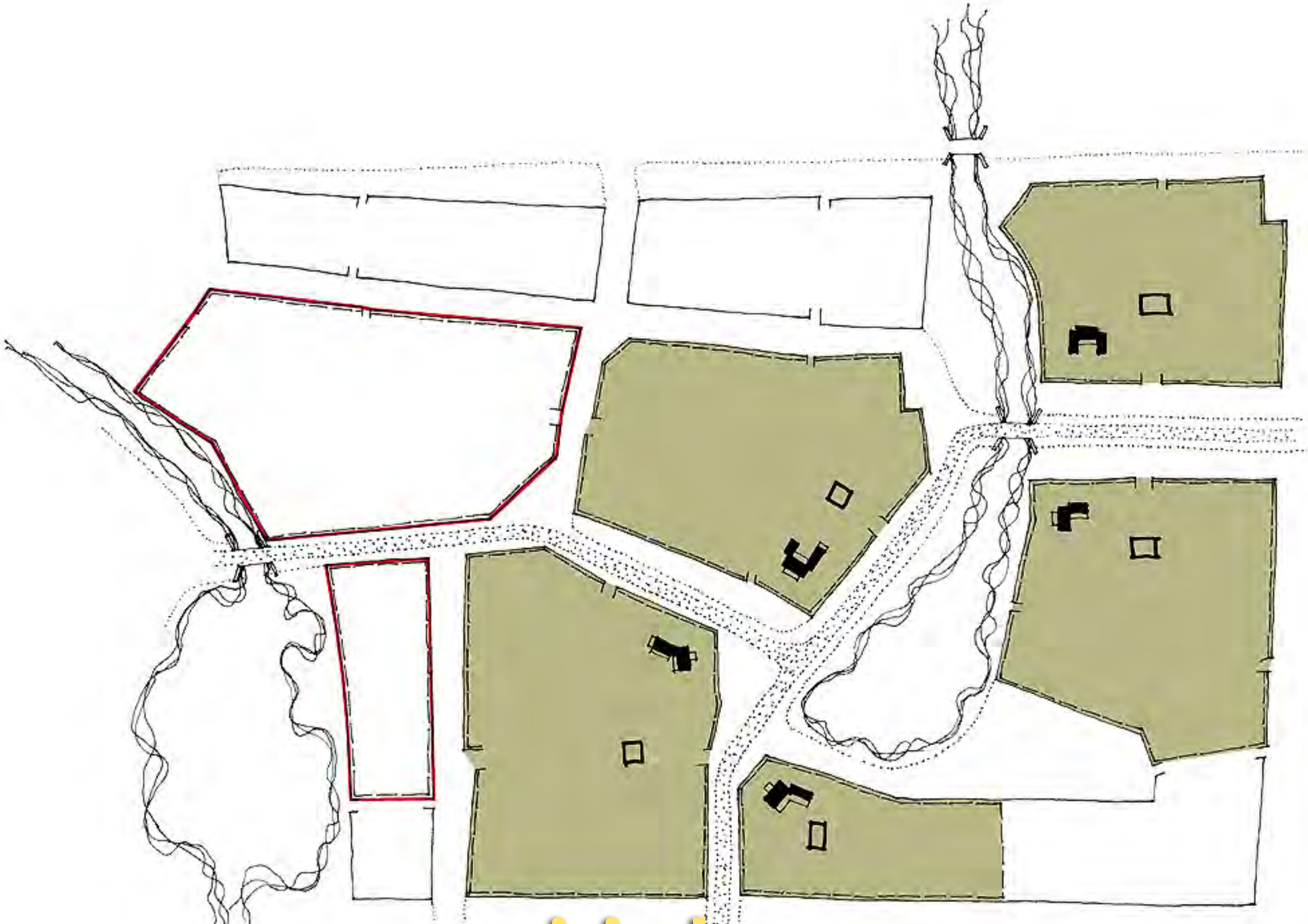
www.originalgreen.org



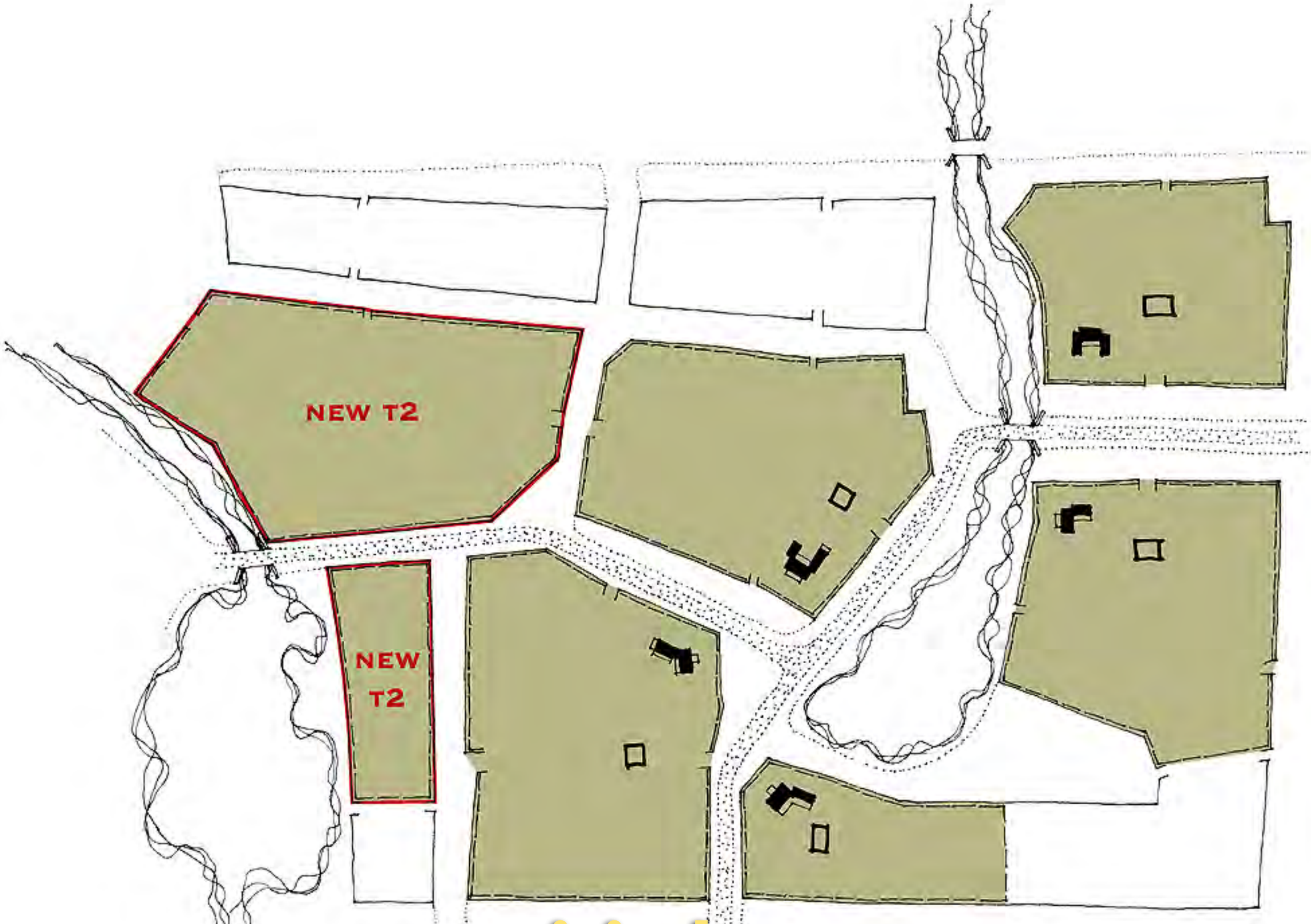
www.originalgreen.org



www.originalgreen.org



www.originalgreen.org

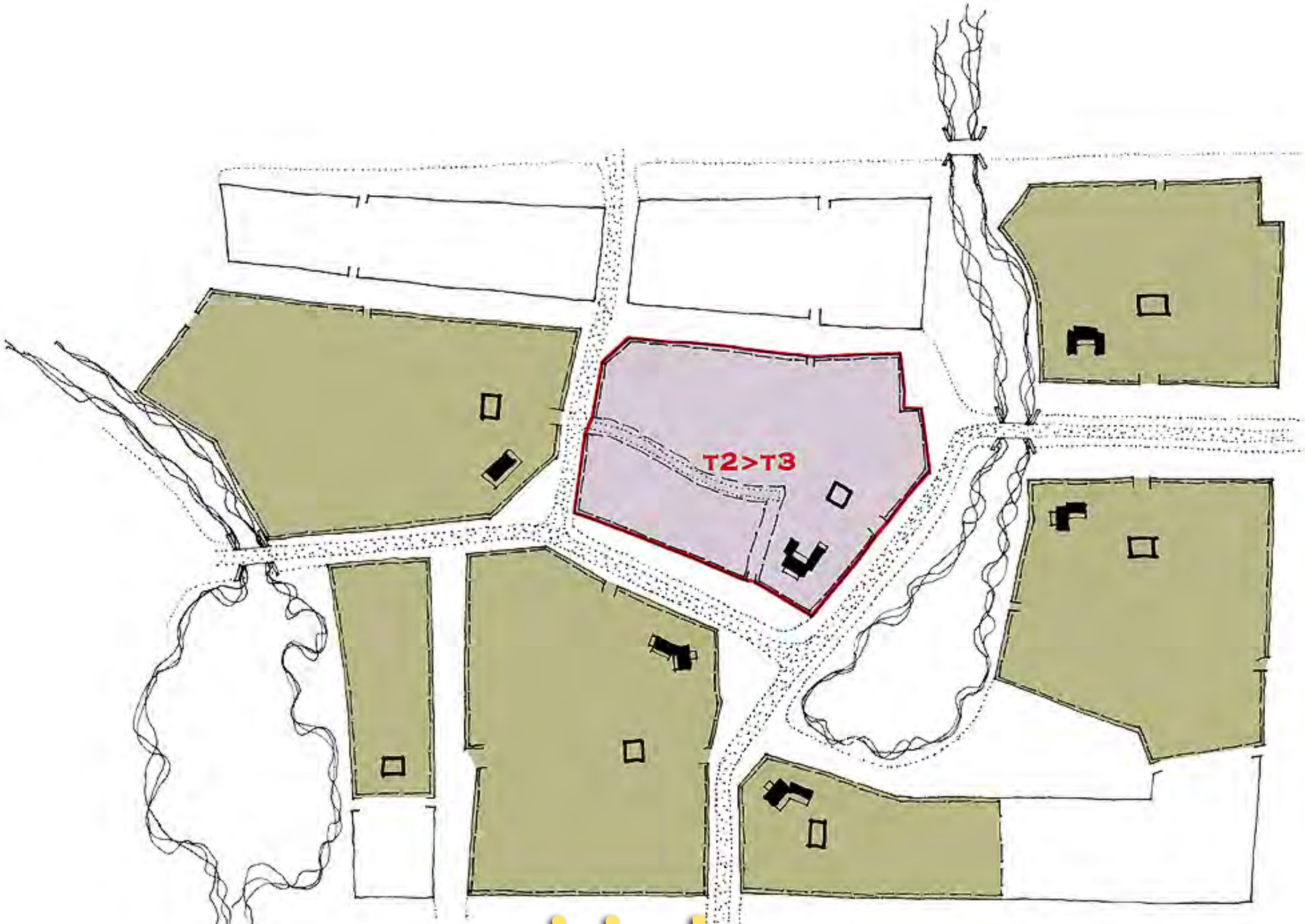


www.originalgreen.org

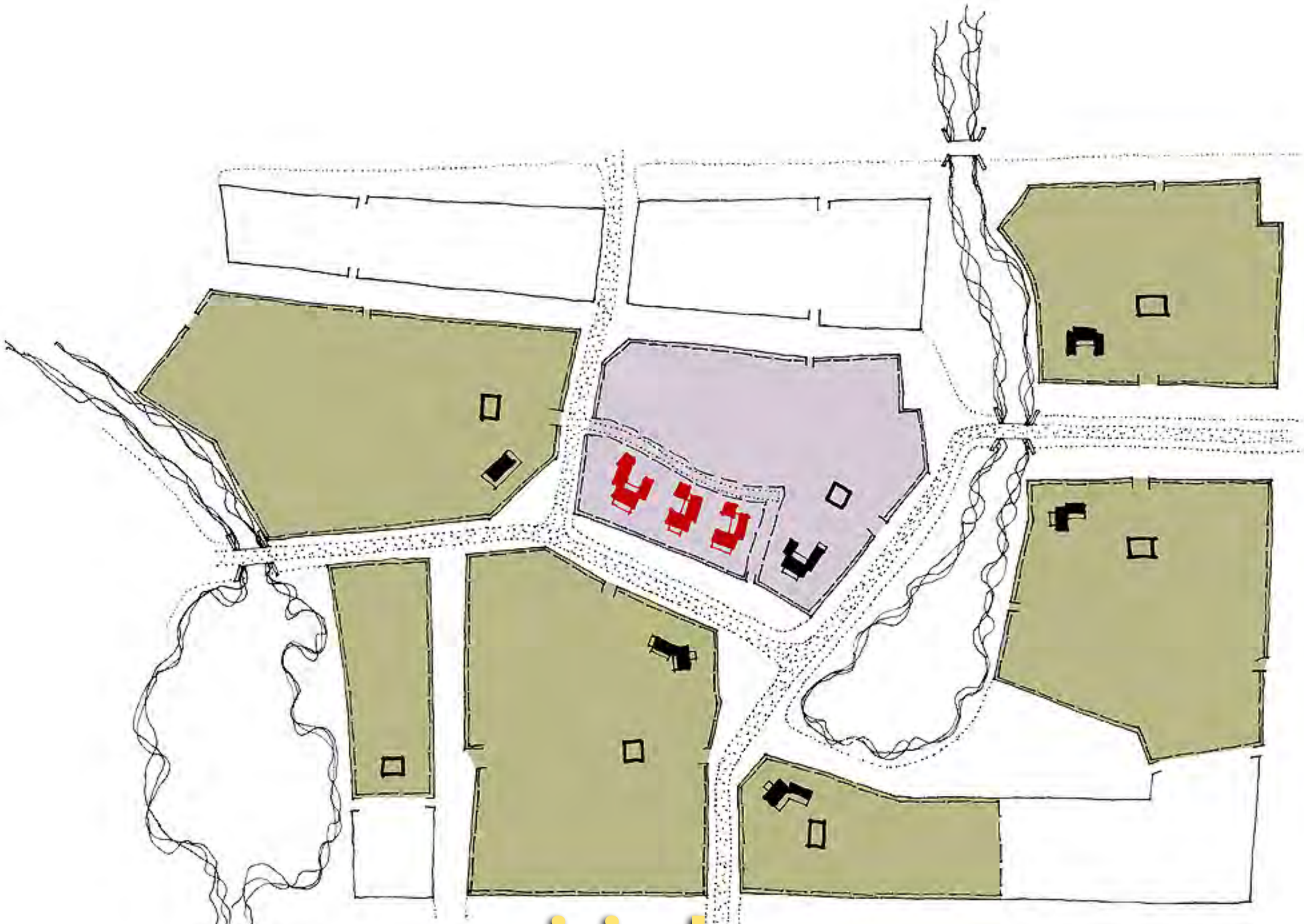
www.originalgreen.org

www.originalgreen.org

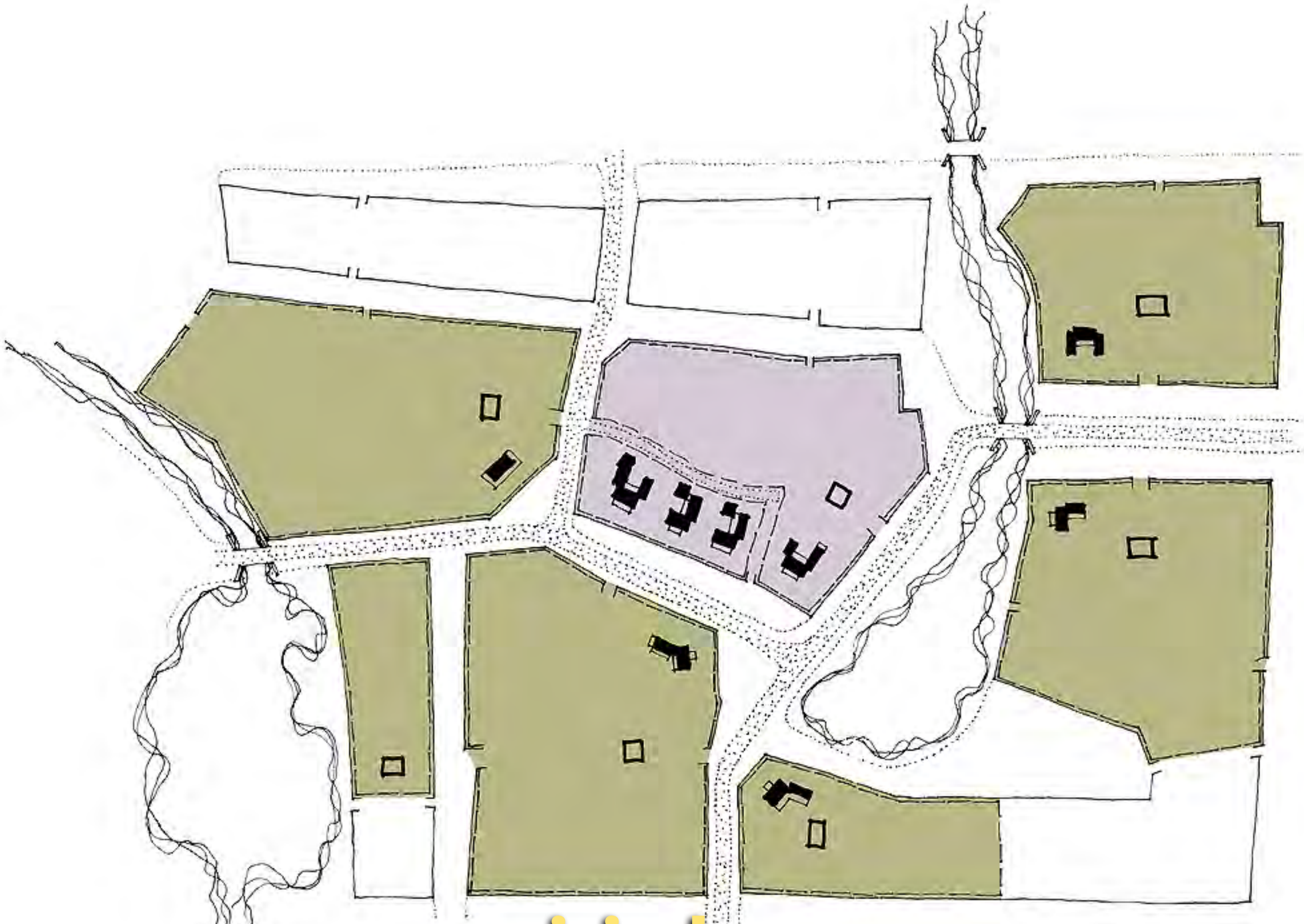
www.originalgreen.org



www.originalgreen.org



www.originalgreen.org

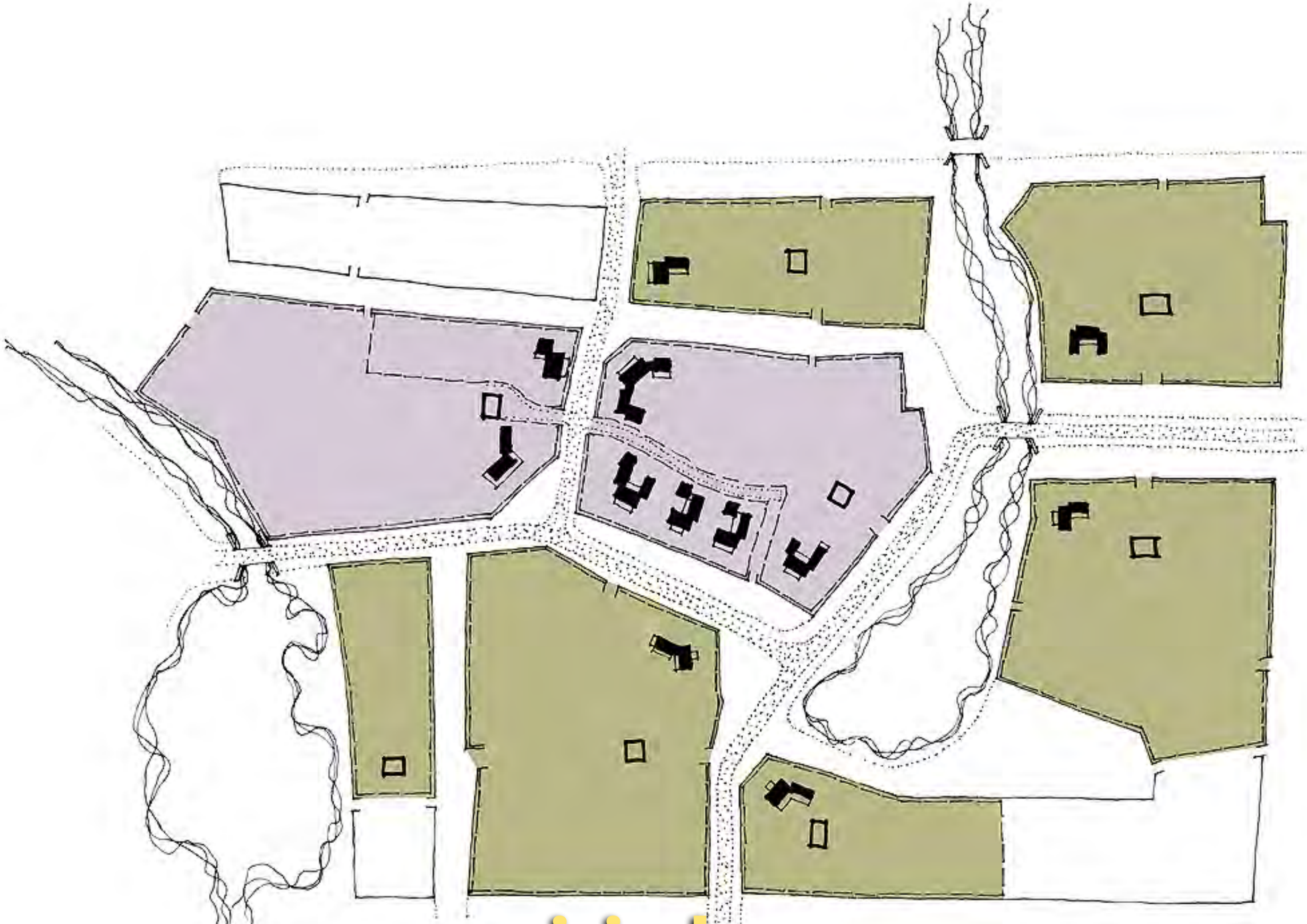


www.originalgreen.org

www.originalgreen.org

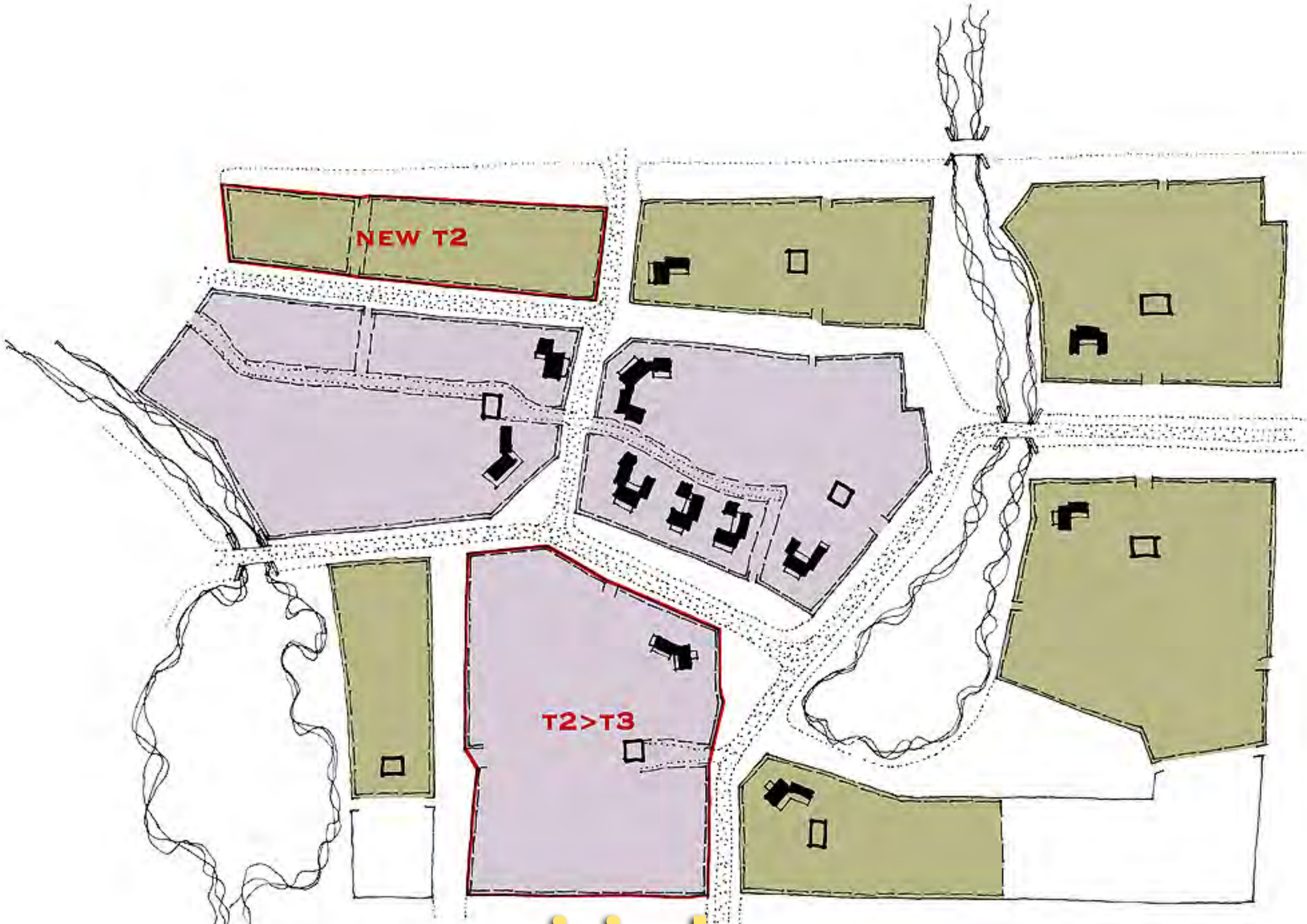
www.originalgreen.org

www.originalgreen.org



www.originalgreen.org

www.originalgreen.org

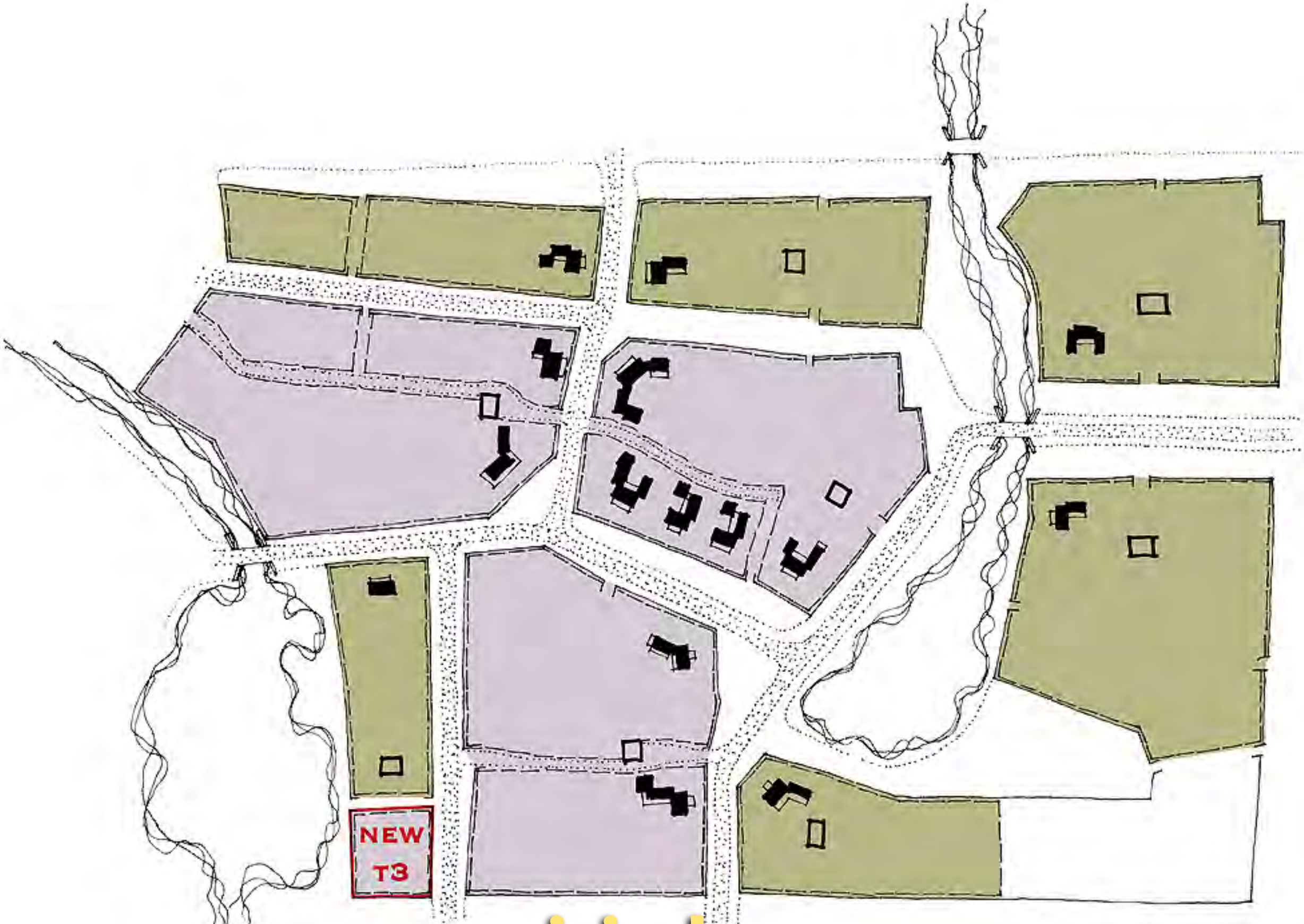


www.originalgreen.org

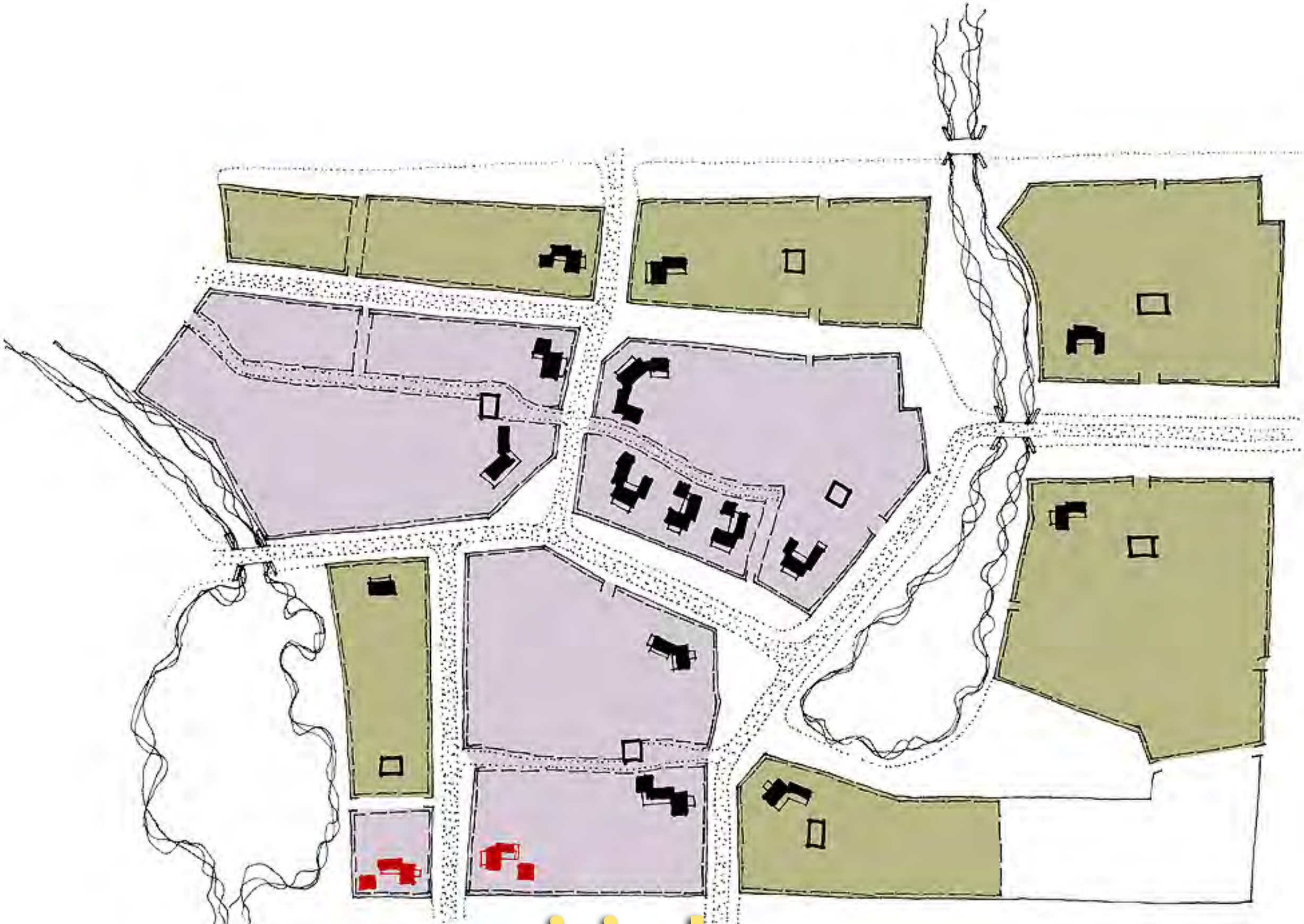
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

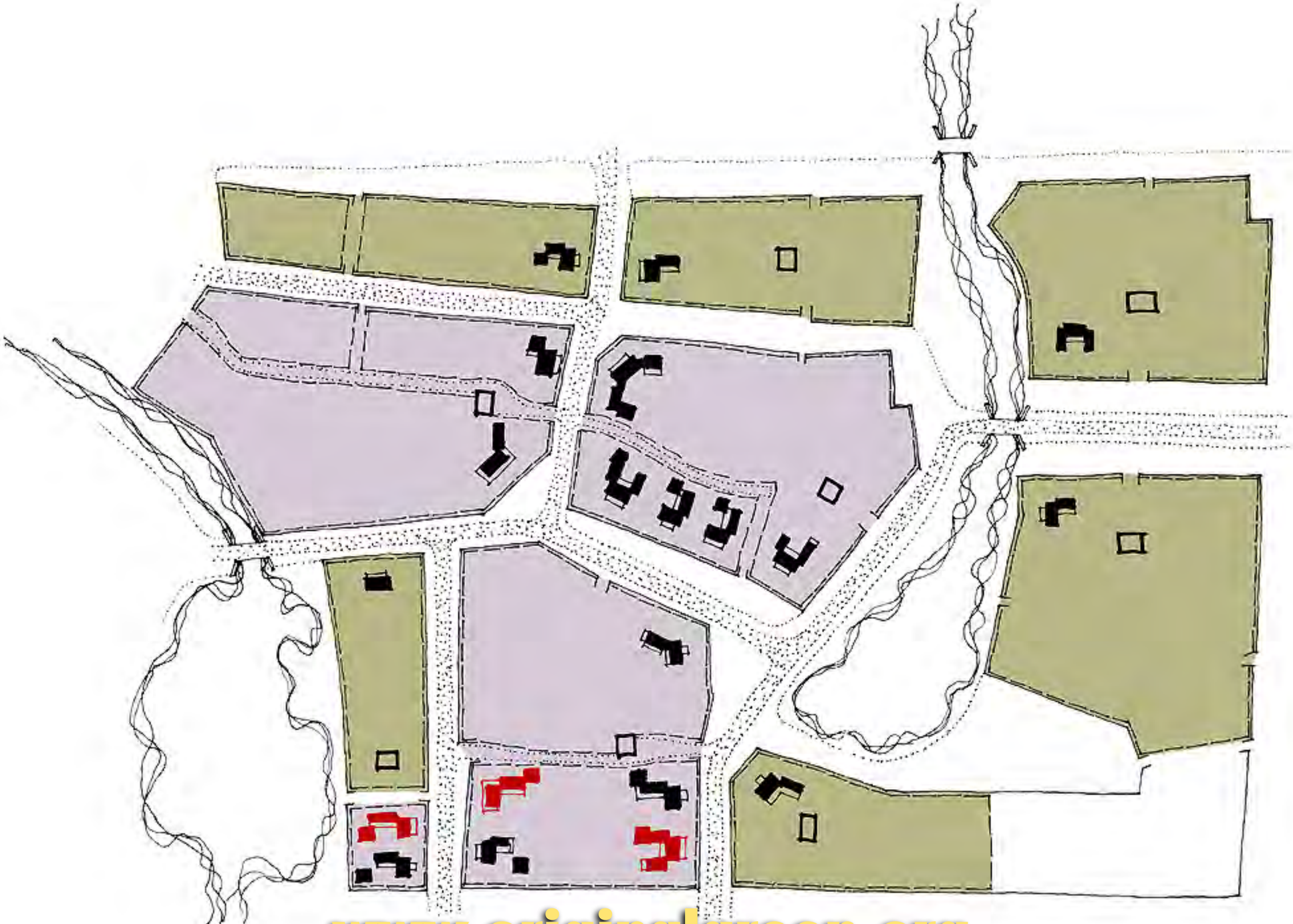


www.originalgreen.org

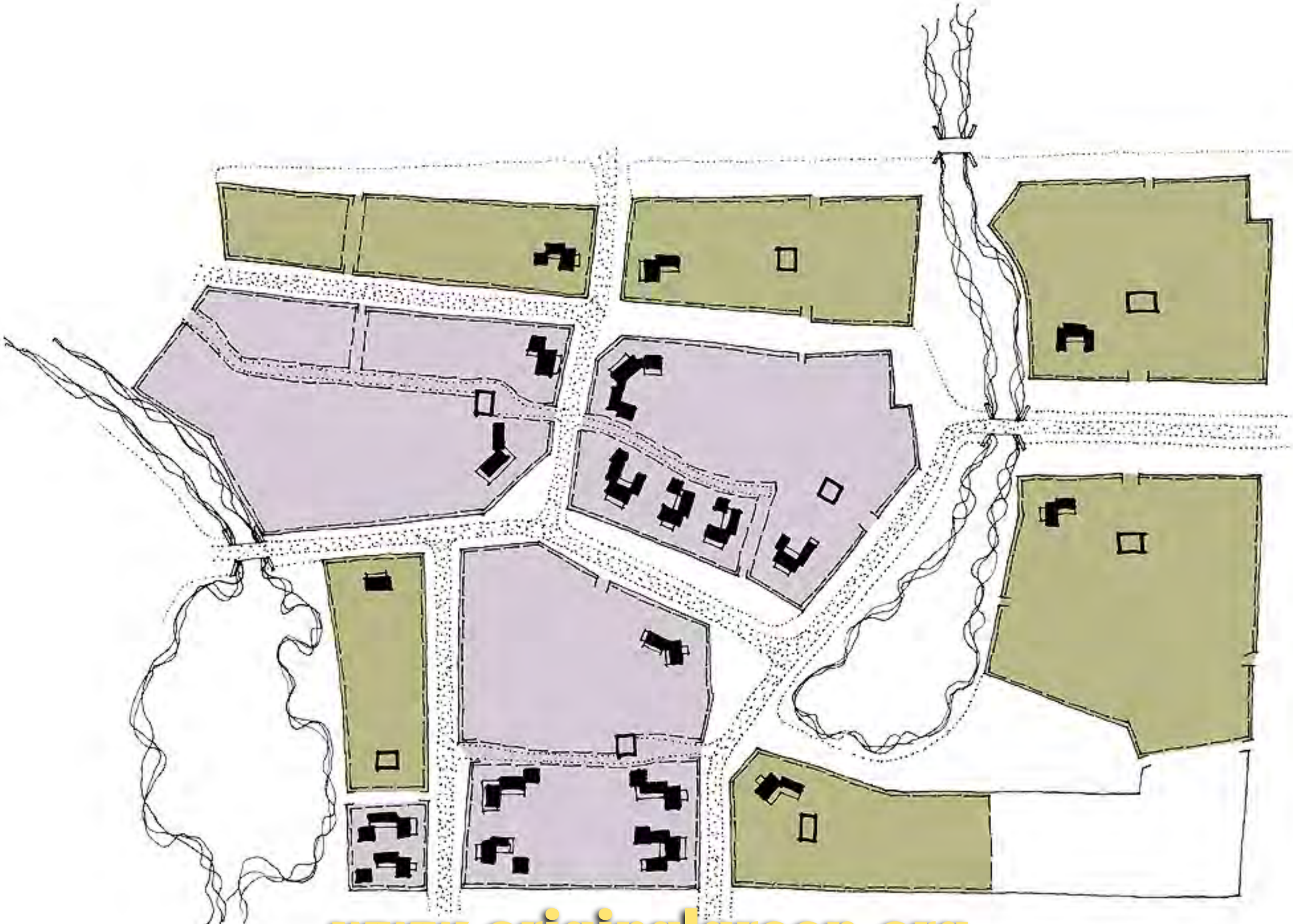


www.originalgreen.org

www.originalgreen.org

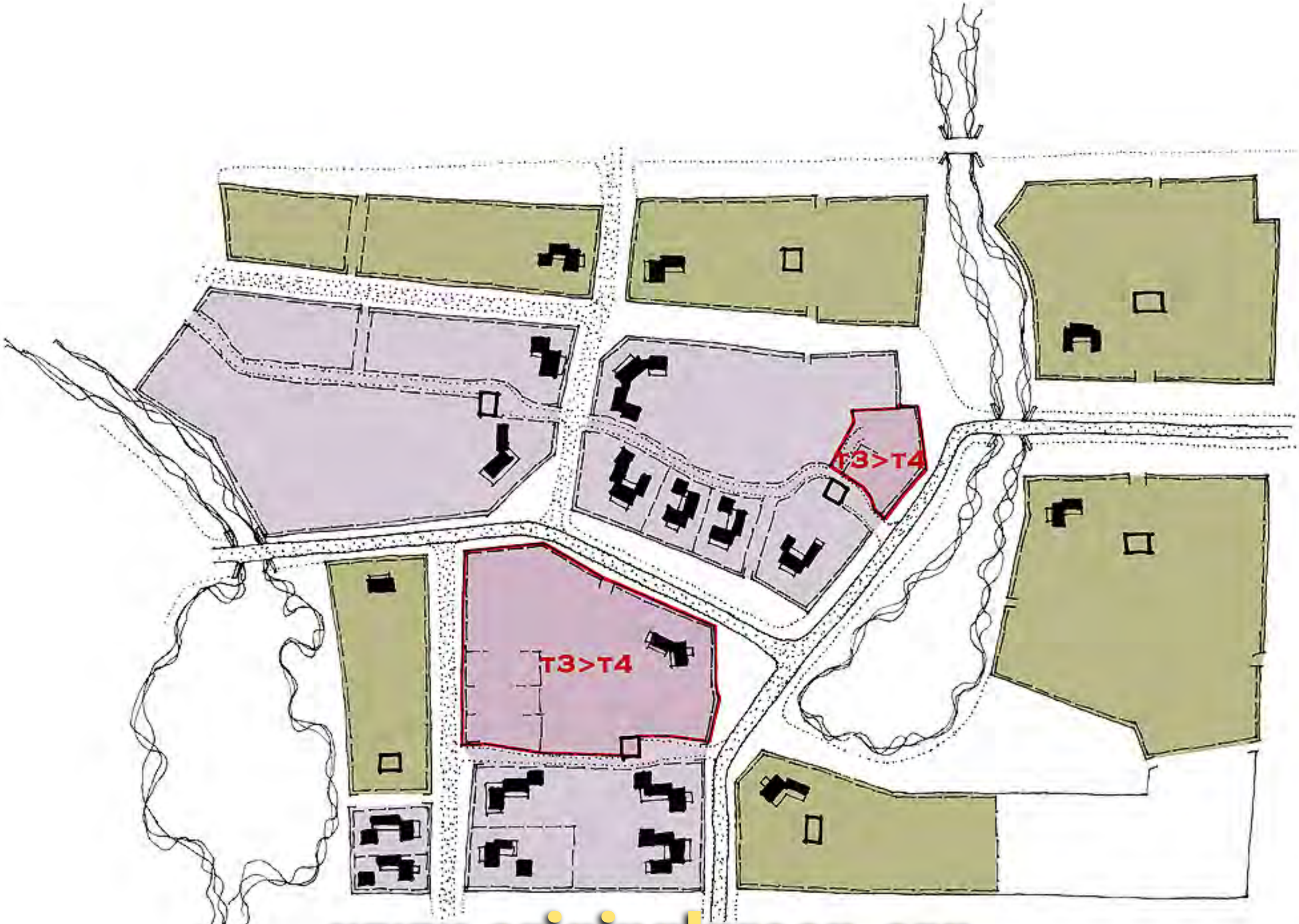


www.originalgreen.org



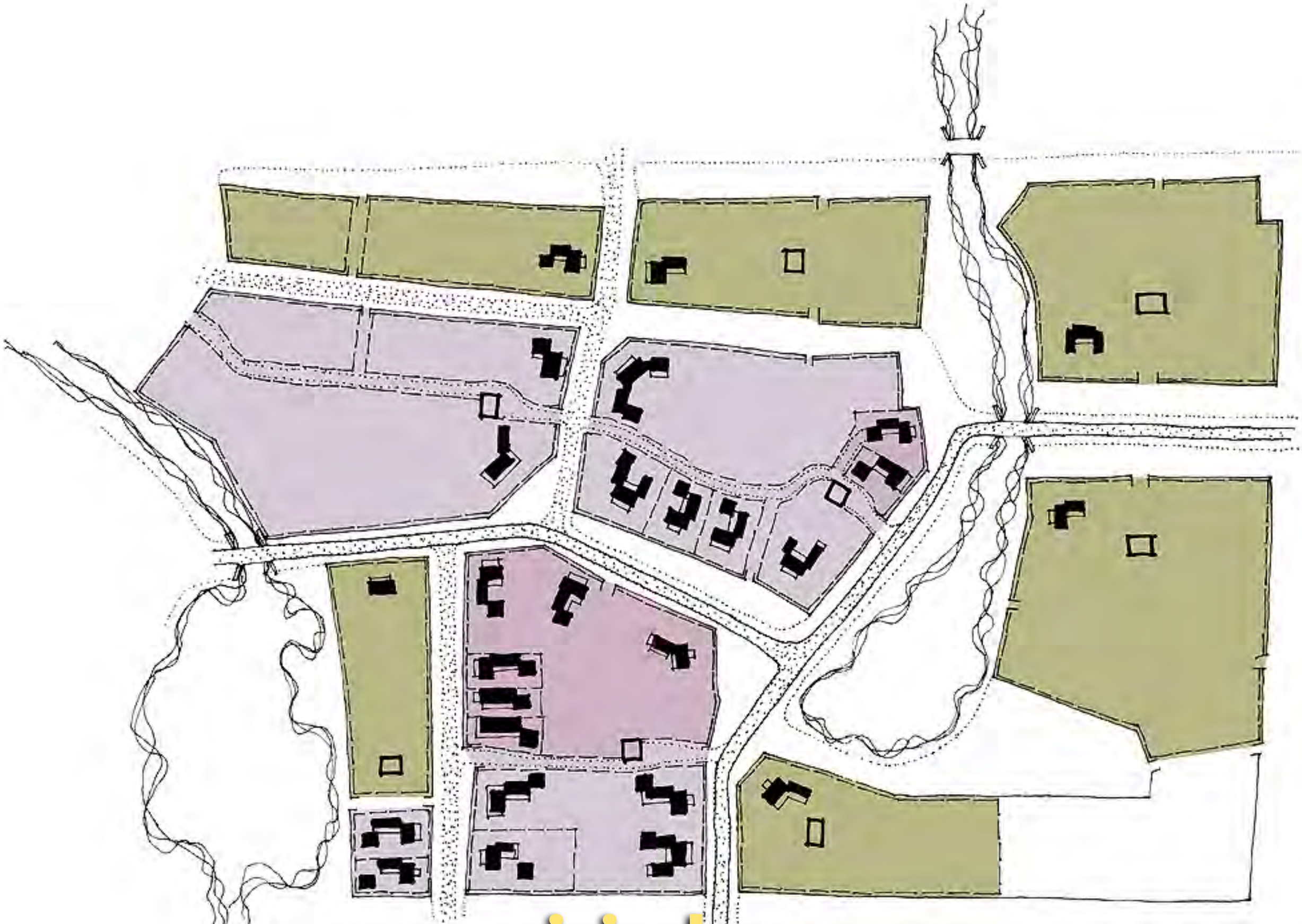
www.originalgreen.org

www.originalgreen.org

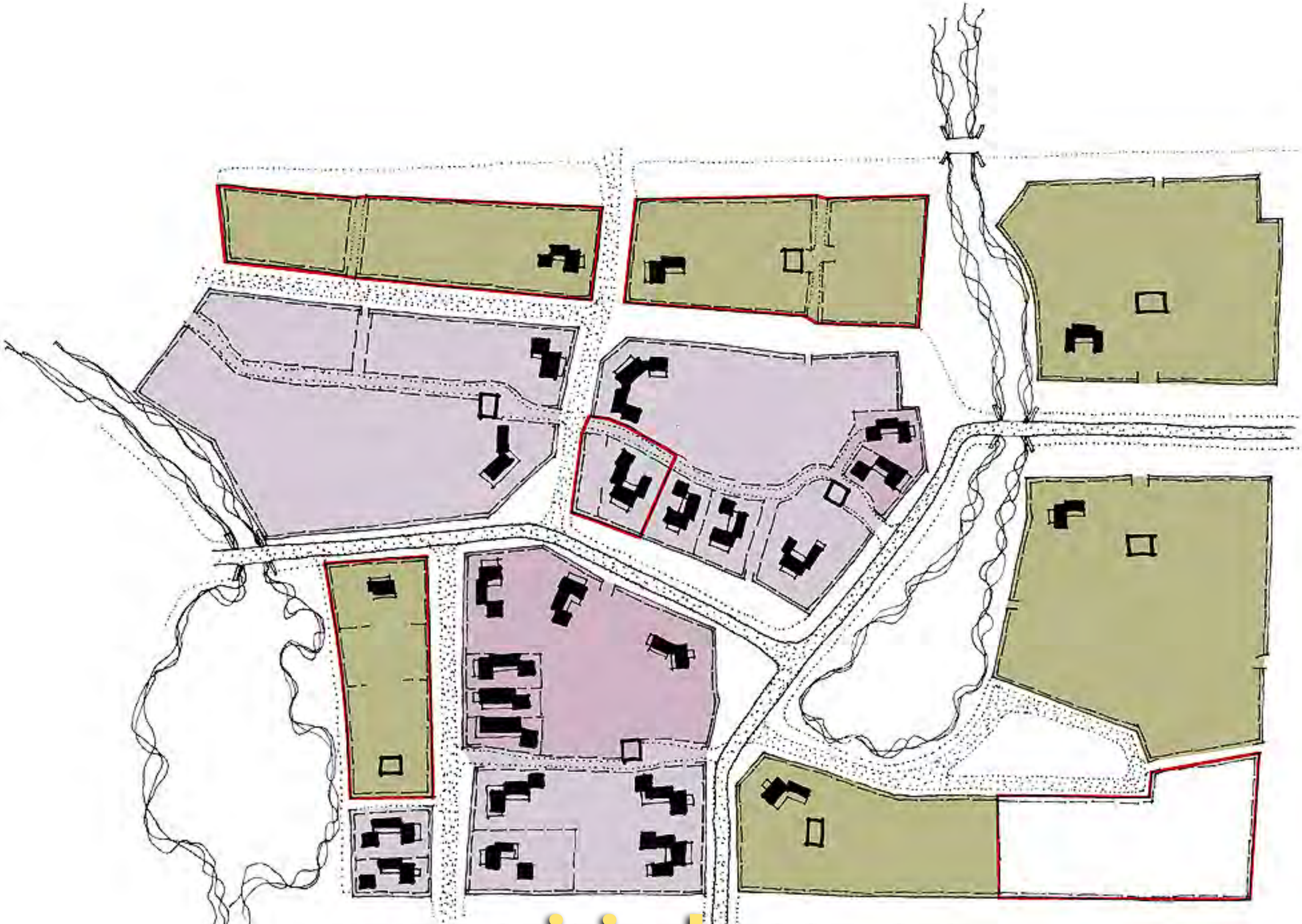


www.originalgreen.org

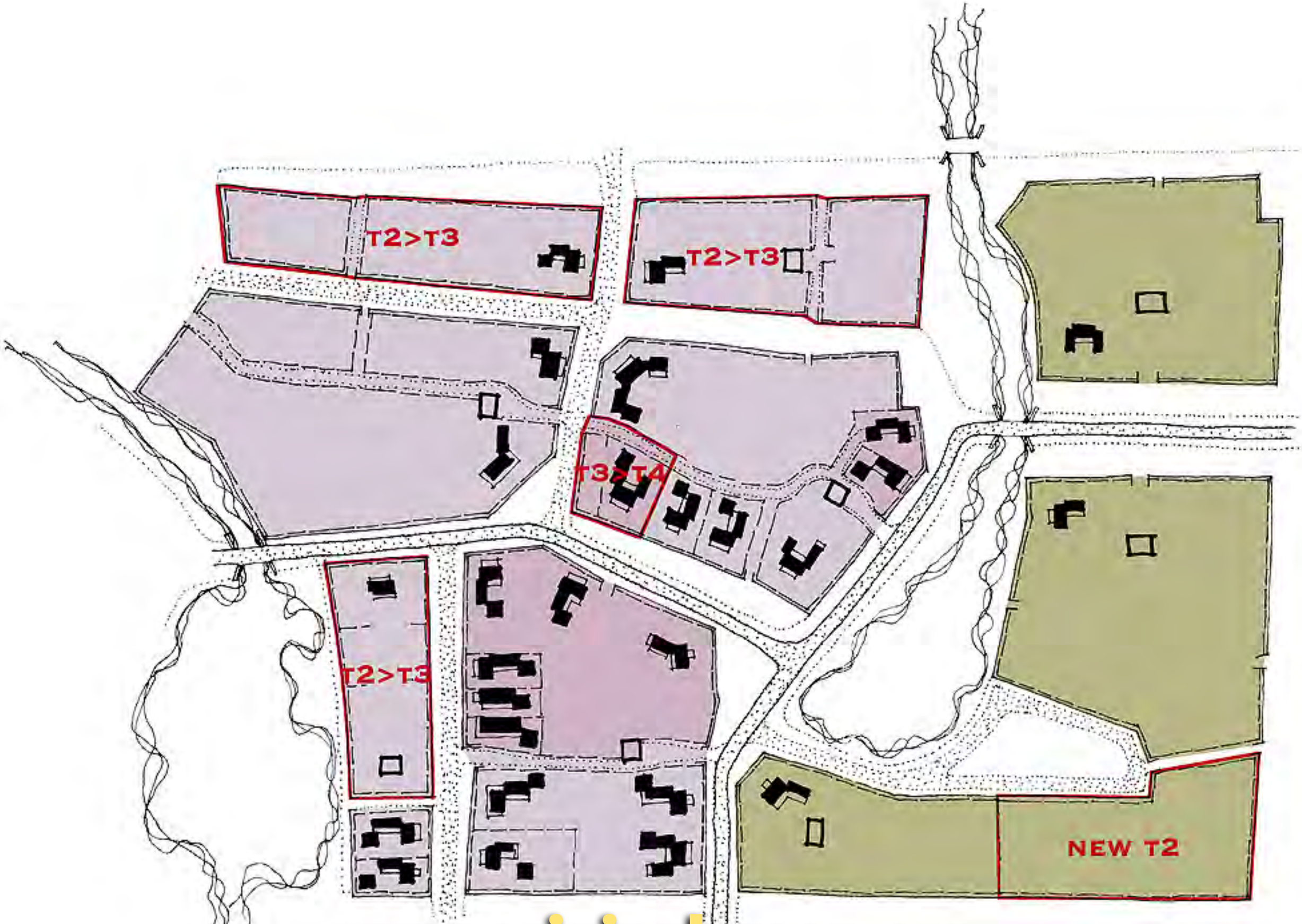
www.originalgreen.org



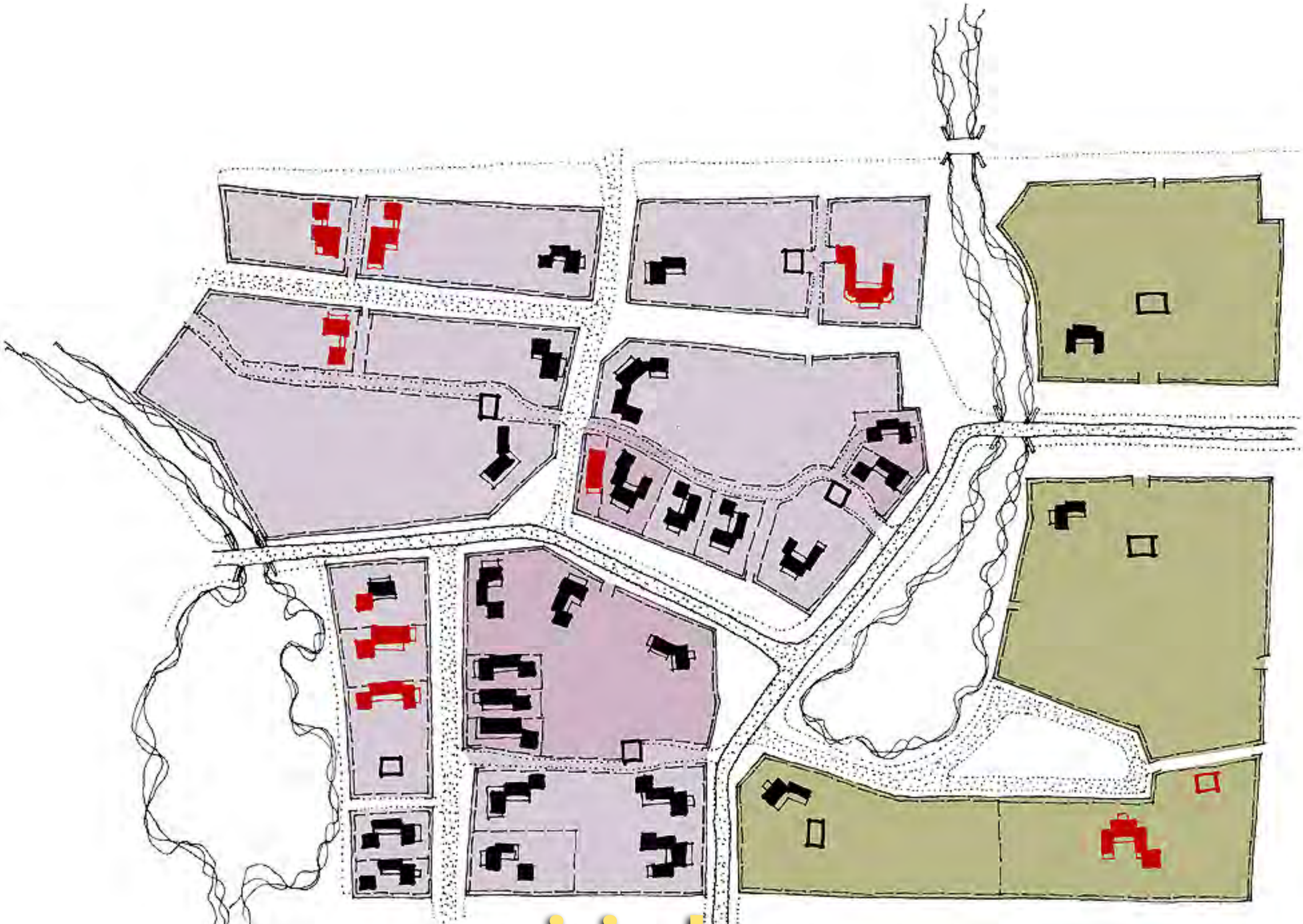
www.originalgreen.org



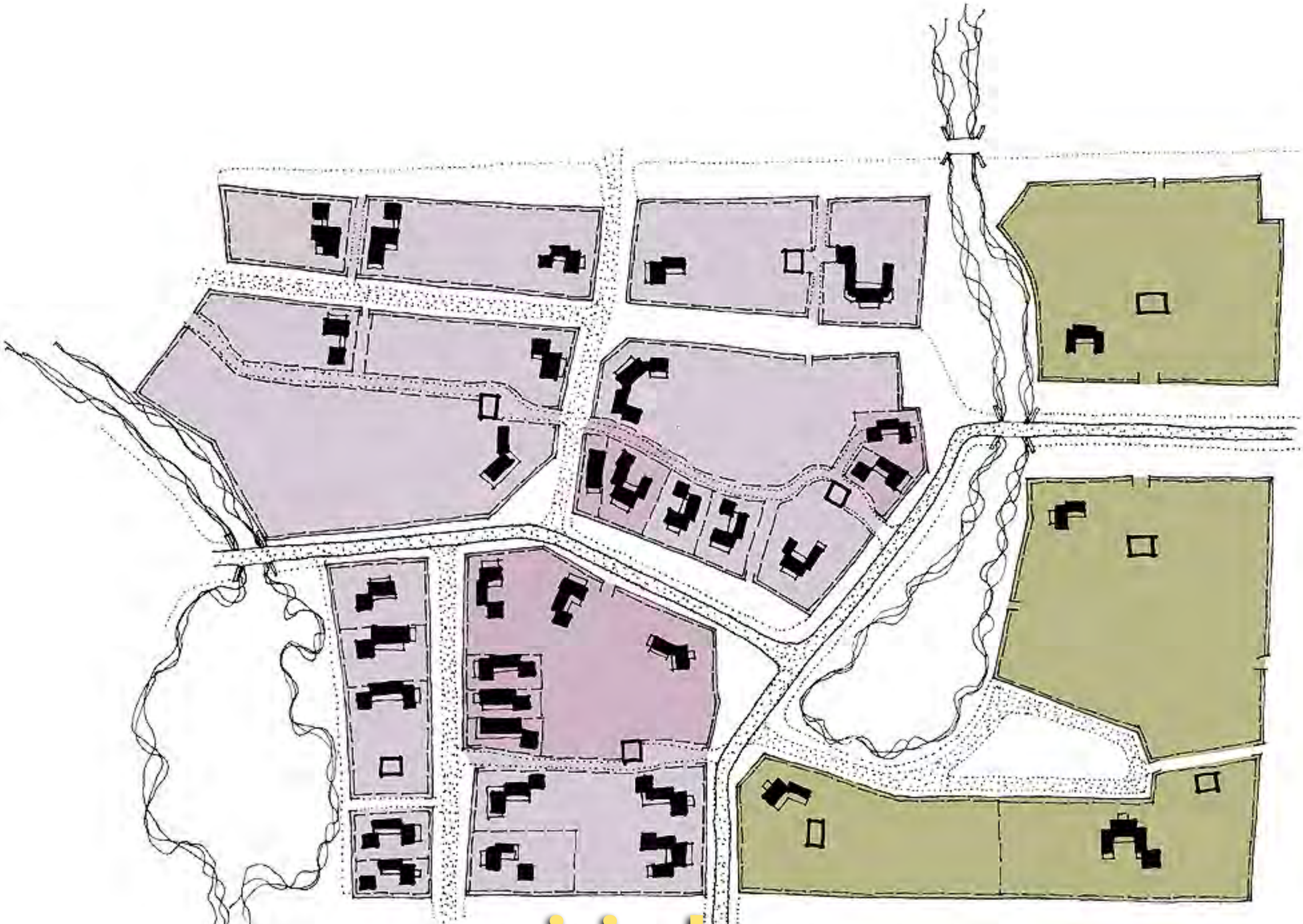
www.originalgreen.org



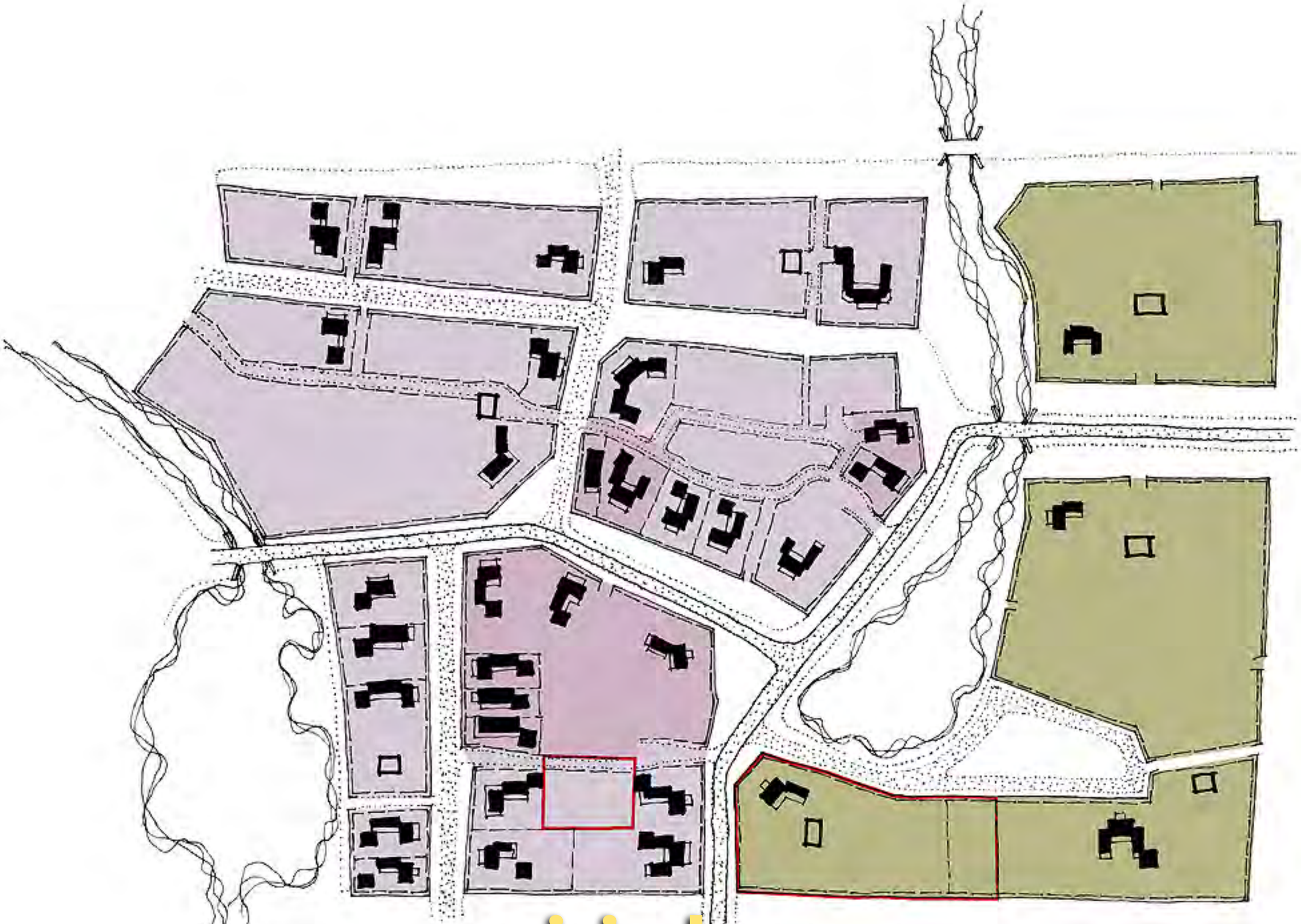
www.originalgreen.org



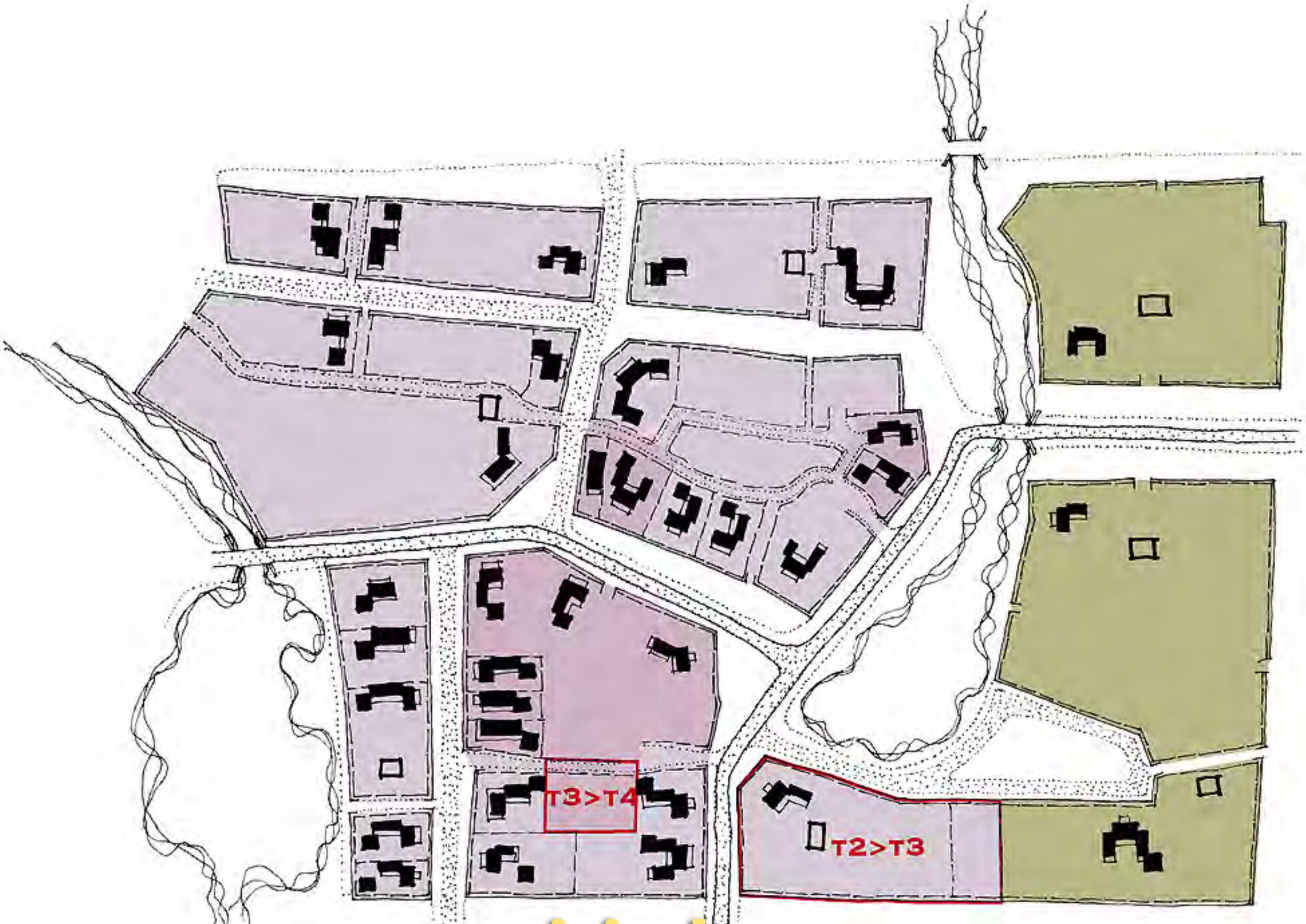
www.originalgreen.org



www.originalgreen.org



www.originalgreen.org

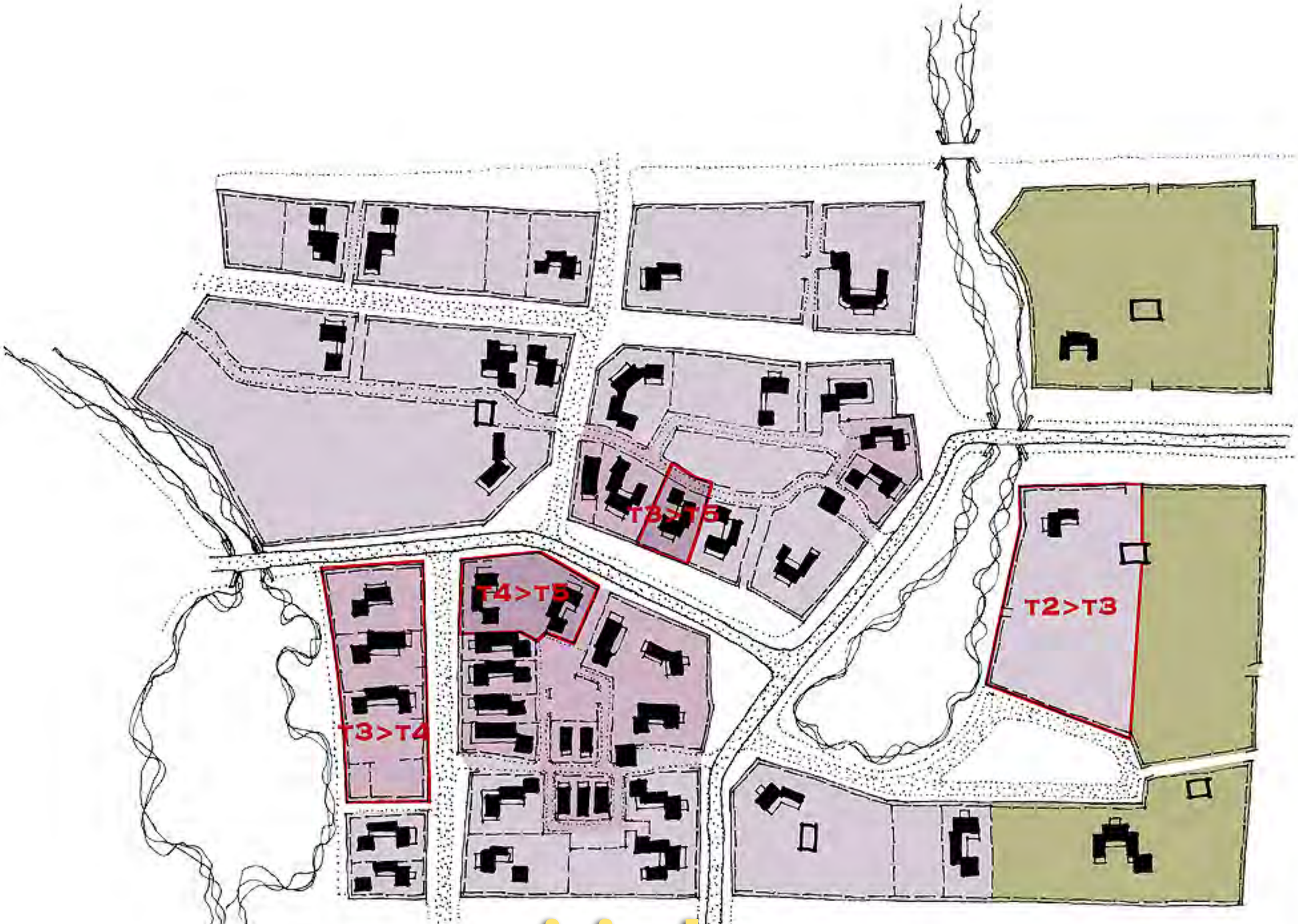


www.originalgreen.org

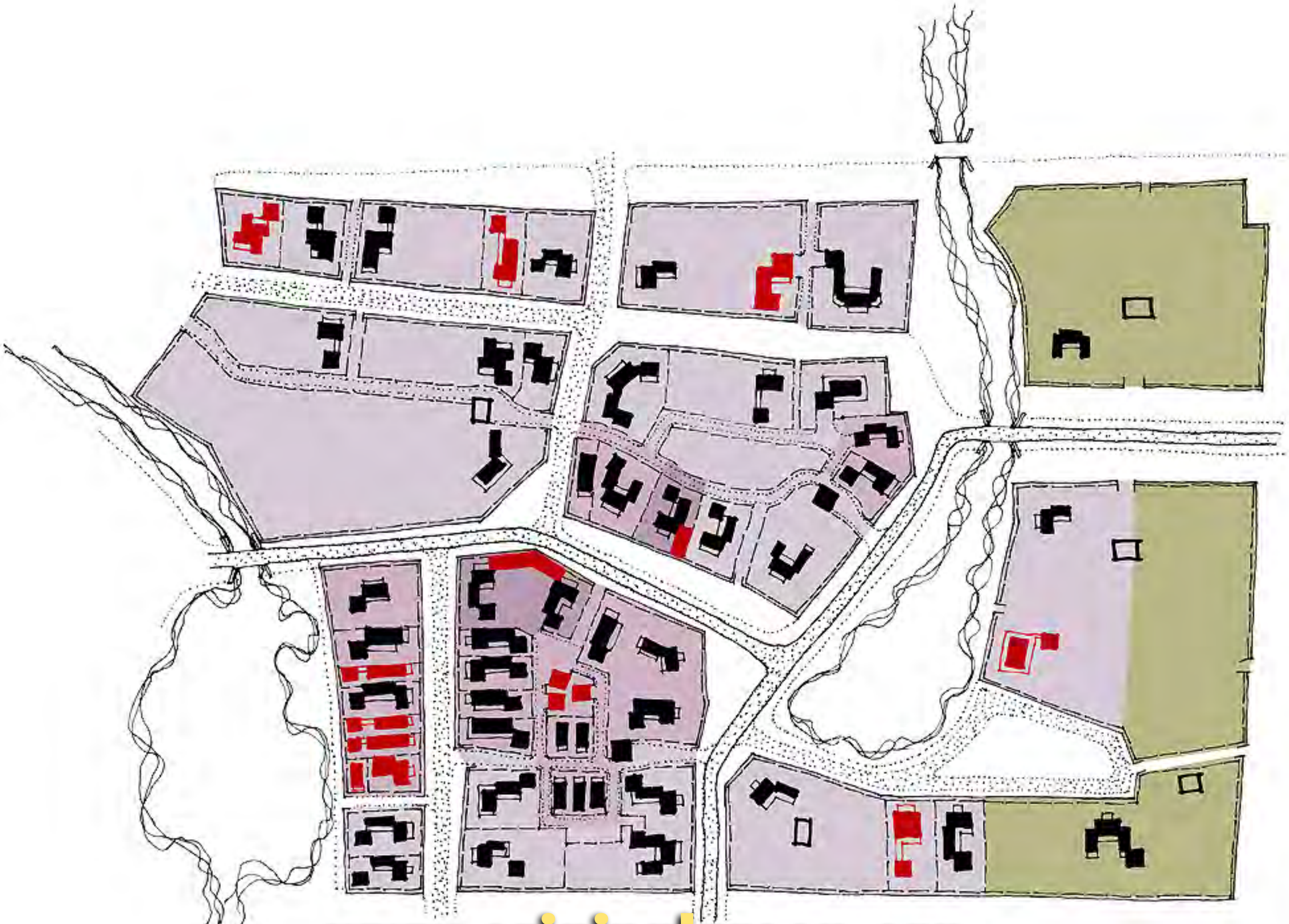
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

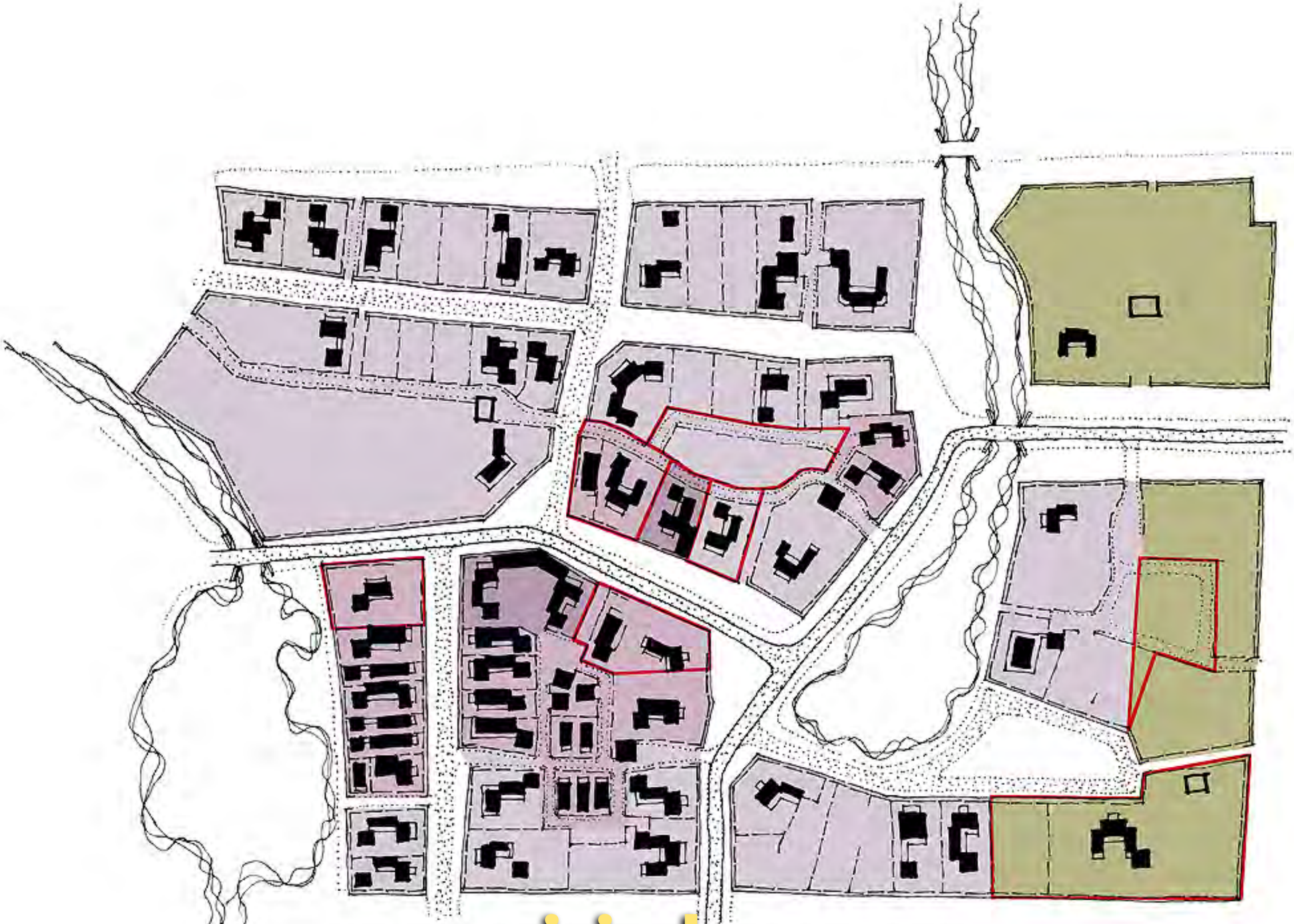


www.originalgreen.org

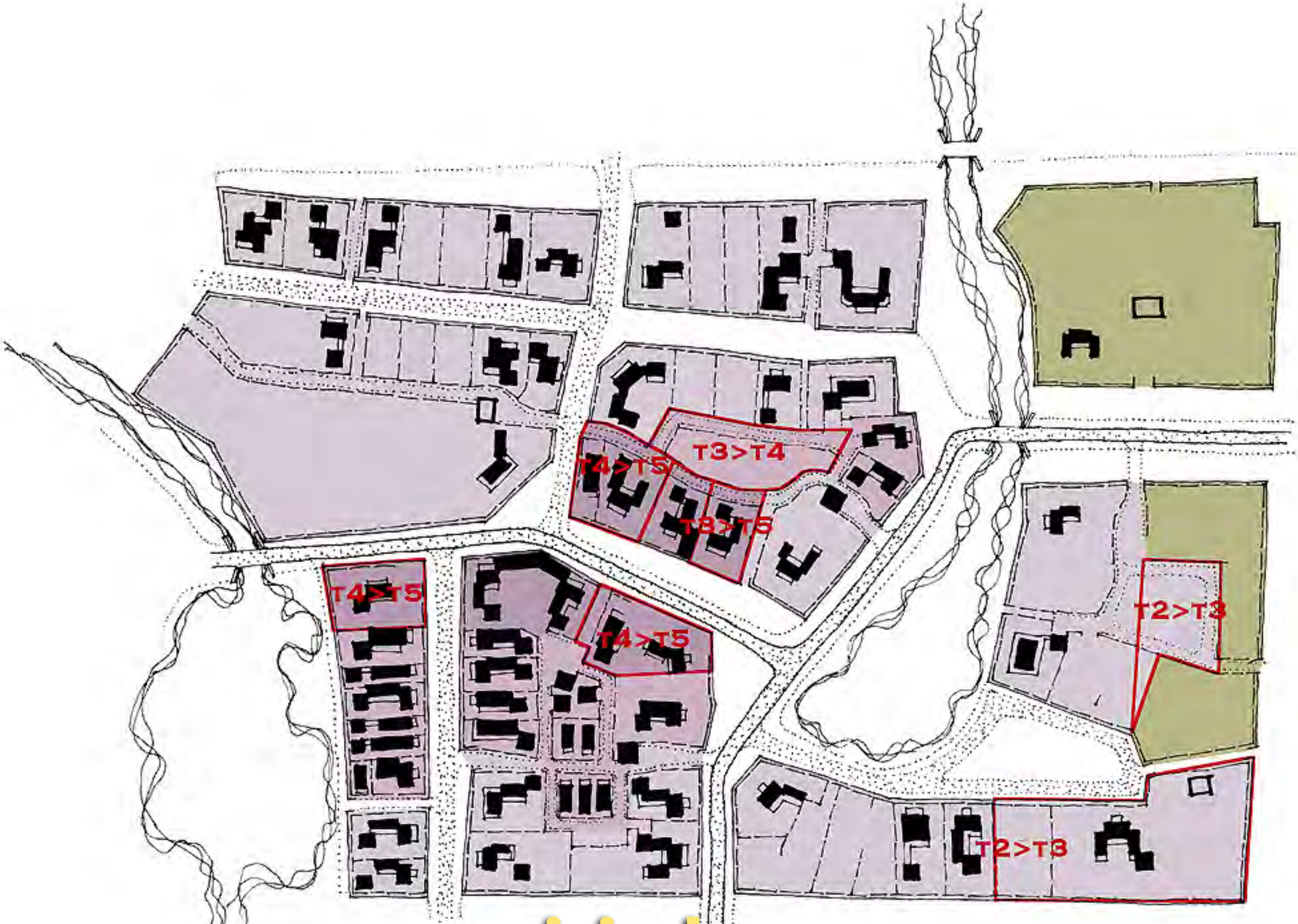


www.originalgreen.org

www.originalgreen.org



www.originalgreen.org



www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

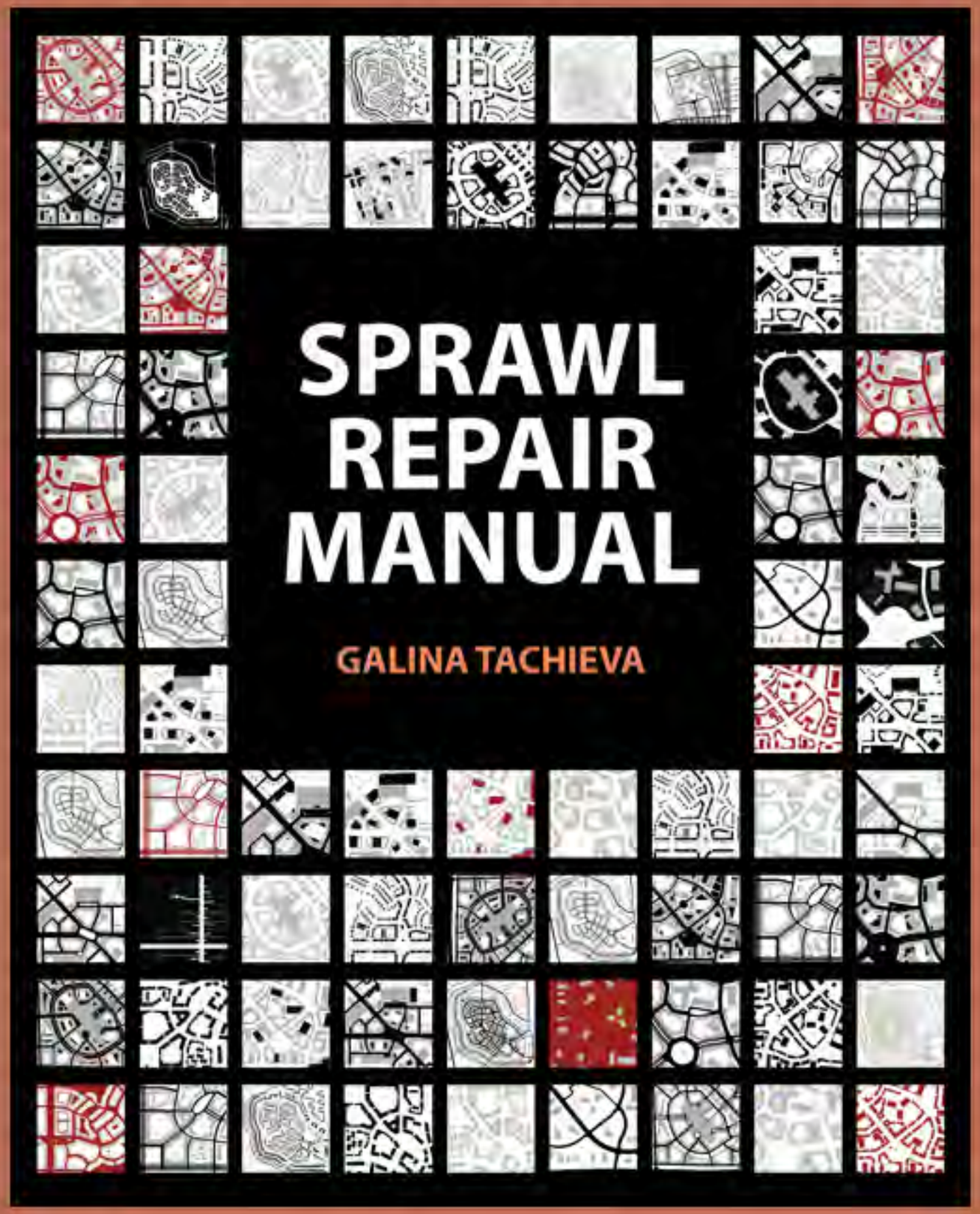
www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org

www.originalgreen.org


SPRAWL
REPAIR
MANUAL
GALINA TACHIEVA

Frugal Buildings *through the* Lens *of* Value *based on* Money

★ Architecture's Original Scam: Glass Towers

www.originalgreen.org

LEED Economics

- ★ Additive System
- ★ Pay *for* Diagnosis, Not Cure
- ★ Cannot Ensure Sustainability

Project:SmartDwelling

Towards A Sustainable Architecture

Sustainability is a function of the building and of the community within which it is built.

The Community

Should offer transportation choice (including walking.)

* Should have ordinary daily needs available within walking distance.
* Should have streets and public spaces which are convivial and secure.
* Should have housing suitable for diverse age, income, and family structure.
* Should have a suitable set of civic spaces.
* Should have facilities for the processing of storm water and waste.
* Should have common facilities to process and market agricultural produce.

The Building

Productive

* Dwellings should provide places for food production as appropriate to the transect zone.
* Dwellings should have adequate area dedicated to food processing and storage.
* Lots should provide places for tool storage, as appropriate to the transect zone.
* Buildings should catch and reuse rainwater for domestic use.
* Buildings should be prepared for the installation of photovoltaic panels and/or wind generators.

Contextual

* Buildings should provide frontages that engage the pedestrian passersby.
* Building function, configuration and disposition on the lot should support its transect zone.
* Building plans should be comfortable, functional and flexible.
* Buildings should incorporate the knowhow of their regional heritage.
* Sites should be designed integrally with the building, the landscaping and its appurtenances.
* Landscape material should be appropriate to the region.
* Buildings should be designed to minimize site grading

Buildable

* Building materials should be durable and cost effective.
* Building materials should be easily repaired, rather than requiring replacement.
* Building materials should be detailed and assembled in a proven manner.
* Buildings materials should minimize energy embodied through processing and transportation.
* Building materials that require greater processing should be recycled.
* Buildings should use recycled components and materials to the extent feasible.
* Buildings design should minimize construction waste, which should be recycled as possible.
* Building should be detailed for readily readily available skill sets.

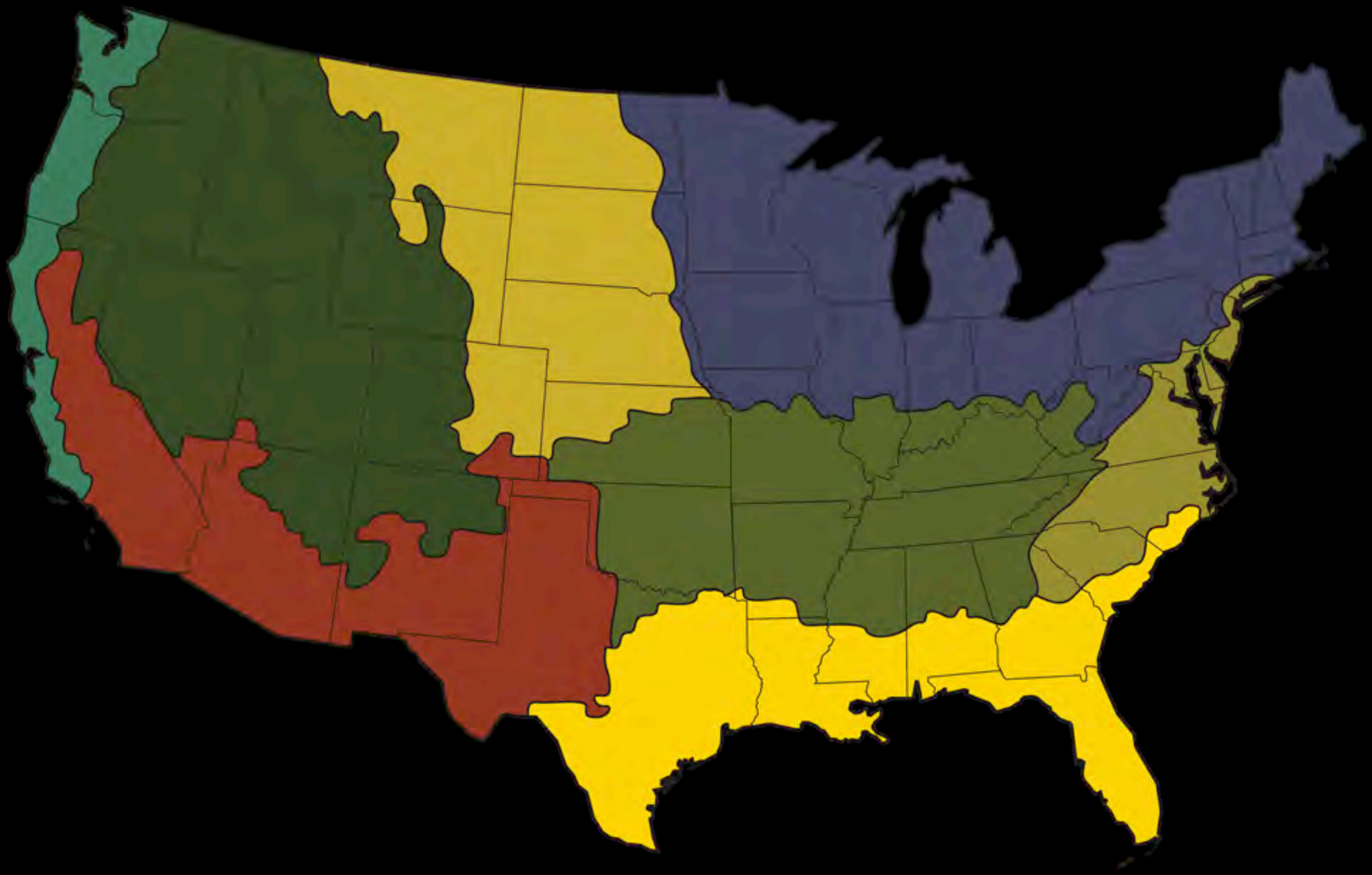
Flexible

* Dwellings should include a potential workplace somewhere on the site.
* Buildings should be designed to expand, including upwards and towards the frontage.
* Buildings may have ancillary structures.
* Buildings should be simple in massing and structure in order to be more easily adaptable.
* Dwellings should enable occupants to age in place.

Frugal

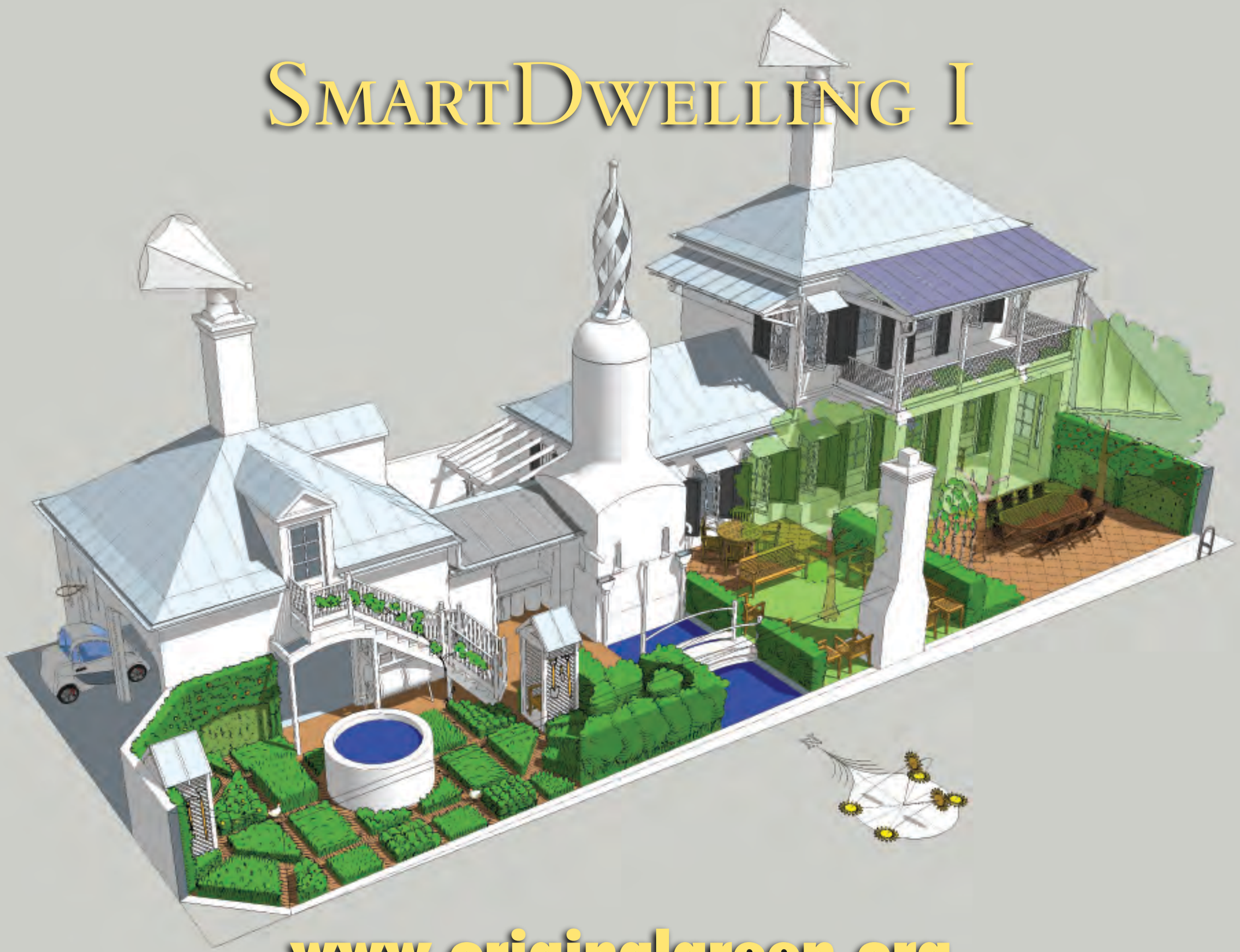
* Dwellings should be no larger than necessary to be livable.
* Building plans should maximize economic and functional efficiency.
* Buildings should respond to orientation while not undermining the pedestrian frontages.
* Buildings should provide adequate and convenient recycling facilities.
* Buildings should be designed to reduce energy consumption, through passive techniques primarily
* Building insulation and appliances should be as efficient as feasible.
* Dwellings should include a sunny laundry-drying area shielded from street frontages.
* Buildings should provide plug-ins for electrical vehicles and include a bike garage.

www.originalgreen.org



www.originalgreen.org

SmartDwelling I



www.originalgreen.org

Footprint *of the* Garden

www.originalgreen.org

Hearth Garden
www.originalgreen.org

Kitchen Garden

www.originalgreen.org

Meeting *the* Sky

www.originalgreen.org

Breeze Chimney

www.originalgreen.org

Tower *of* Wind *and* Water

www.originalgreen.org

Sideyard Sail
www.originalgreen.org

Invisible Things

www.originalgreen.org

Windows *and* Shutters

www.originalgreen.org

Laundry Eave

www.originalgreen.org

Chickens *and* Compost

www.originalgreen.org

Green Wall
www.originalgreen.org

Curtain Columns

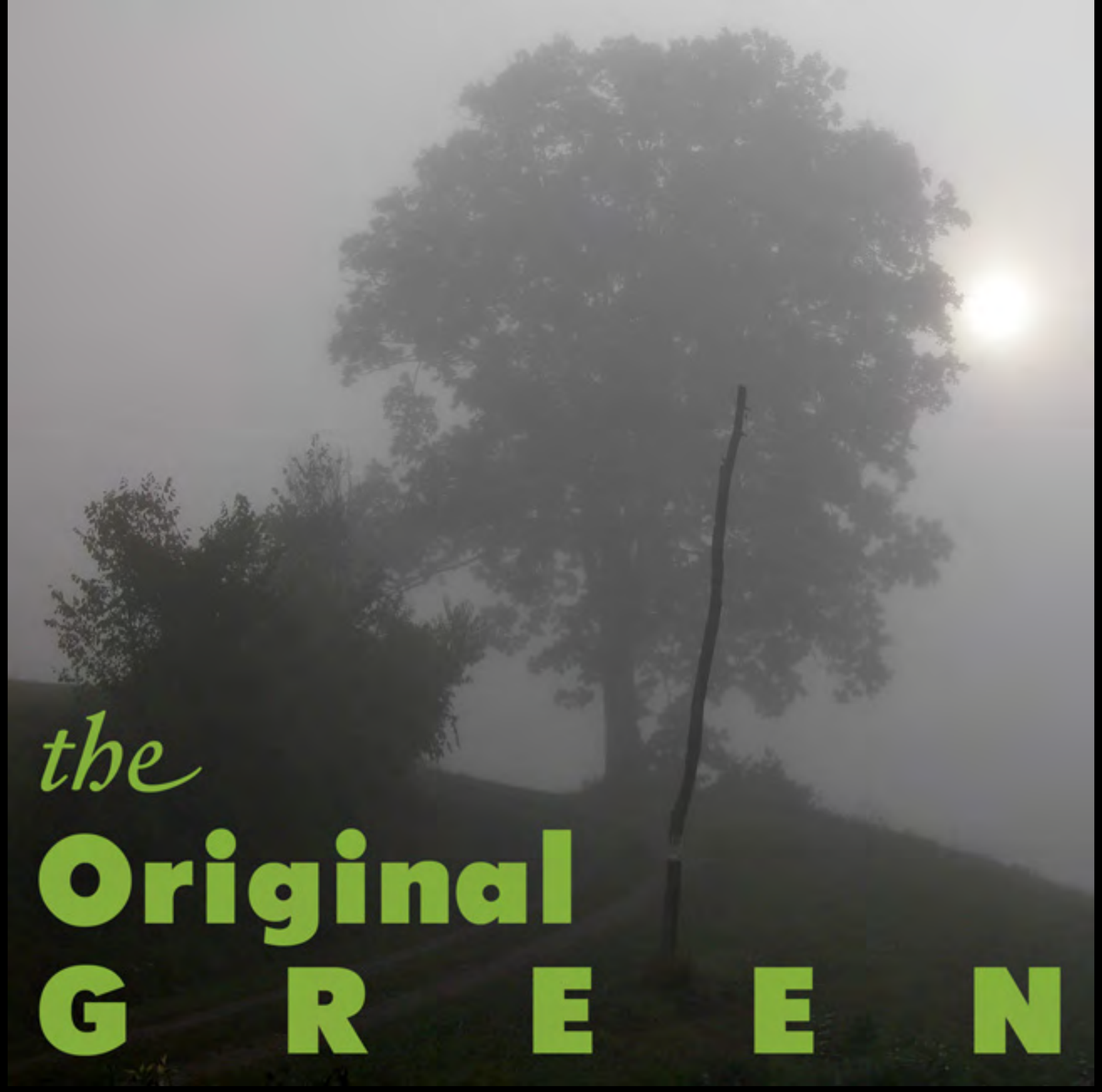
www.originalgreen.org

Cool Dip *in the* Master Garden

www.originalgreen.org

The Unburdening *of* America

www.originalgreen.org



www.originalgreen.org