CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

ST. CHARLES SINCE 1834

COMMUNITY DEVELOPMENT/PLANNING DIVISION PHONE: (630) 377-4443 FAX: (630) 377-4062

SPECIAL USE APPLICATION

Received Date
RECEIVED
St. Charles, IL
SEP 26 2014
CDD
Planning Division

CITYVIEW
Project Name: 600-660 Randall Rd.
Project Number: 2014 -PR- 008
Application Number: 2014 -AP- 033

To request a Special Use for a property, or to request to amend an existing Special Use Ordinance for a property, complete this application and submit it with all required attachments to the Planning Division.

City staff will review submittals for completeness and for compliance with applicable requirements prior to establishing a public hearing date for an application.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Parcel Number (s): 09-33-302-001-0000	
	Street Address (or common location if no address is assigned): 600-660 Randall Rd.	
2. Applicant Information:	Name Dyn Rote, L.L.C.	Phone 815-229-3000
	Address 6801 Spring Creek Rd. Rockford, IL 61114	Fax 815-229-3001
		Email marvin@firstrockford.com
3. Record Owner Information:	Name Same as Applicant	Phone
	Address	Fax
		Email
4. Billing: *To whom should costs for this application be billed?*	Name Same as Applicant	Phone
	Address	Fax
		Email

Information Regarding Proposed Special Use:

Comprehensive Plan designation of the property: Corridor/Regional Commercial

Is the property a designated Landmark or in a Historic District? No

What is the property's current zoning? BC Community Business, with a SUP for a PUD

What is the property currently used for? Commercial Strip Center

What Special Use(s) are you applying for? Please select from the list of Special Uses in the Zoning Ordinance for the appropriate zoning district.

Drive through facility

If the proposed Special Use is approved, what improvements or construction are planned?

Reconfiguration of the parking lot and modifications to the north side of the building to accommodate the drive through facility.

For Special Use Amendments only:

What Special Use ordinance do you want to amend? Ordinance No. _____

Why is the proposed change necessary?

_____

What are the proposed amendments? (Attach proposed language if necessary)

_____

Note for existing buildings:

If your project involves using an existing building, whether you plan to alter it or not, please contact the St. Charles Fire Department (630-377-4458) and the Building and Code Enforcement Division (630-377-4406) for information on building, life safety and other code requirements. Depending on the proposed use, size of structure and type of construction, these requirements can result in substantial costs.

Attachment Checklist

- ❑ **APPLICATION:** Completed application form signed by the applicant
- ❑ **APPLICATION FEE:** Application fee in accordance with Appendix B of the Zoning Ordinance.
- ❑ **REIMBURSEMENT OF FEES AGREEMENT:** An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.
- ❑ **PROOF OF OWNERSHIP and DISCLOSURE:**
  - a) A current title policy report; or
  - b) A deed and a current title search.

If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).

- ❑ **LEGAL DESCRIPTION:** For entire subject property, on 8 1/2 x 11 inch paper

- ❑ **PLAT OF SURVEY:**

A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.

- ❑ **SOIL AND WATER CONSERVATION DISTRICT APPLICATION:**

Copy of completed Land Use Opinion application as required by state law, as submitted to The Kane-Dupage Soil and Water Conservation District. http://www.kanedupageswcd.org/

- ❑ **ENDANGERED SPECIES REPORT:**

Copy of Endangered Species Consultation Agency Action to be filed with the Illinois Department of Natural Resources. http://dnrecocat.state.il.us/ecopublic/

- ❑ **TRAFFIC STUDY:** If requested by the Director of Community Development.

- ❑ **PLANS:**

All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions.

Copies of Plans:

- Initial Submittal - Fifteen (15) full size copies, Three (3) 11" by 17", and a PDF electronic file on a CD-ROM.
- Revision Submittal for Plan Commission - Twenty-Two (22) full size copies, Three (3) 11" by 17" and a PDF electronic file on a CD-ROM.

- ❑ **SITE PLAN (Note: For a Special Use for PUD, submit PUD Preliminary Plan Application in lieu of Site Plan)**

A plan or plans showing the following information:

1. Accurate boundary lines with dimensions
2. Streets on and adjacent to the tract: Name and right-of-way width
3. Location, size, shape, height, and use of existing and proposed structures
4. Location and description of streets, sidewalks, and fences
5. Surrounding land uses
6. Date, north point, and scale
7. Ground elevation contour lines
8. Building/use setback lines
9. Location of any significant natural features
10. Location of any 100-year recurrence interval floodplain and floodway boundaries
11. Location and classification of wetland areas as delineated in the National Wetlands Inventory
12. Existing zoning classification of property
13. Existing and proposed land use
14. Area of property in square feet and acres
15. Proposed off-street parking and loading areas
16. Number of parking spaces provided, and number required by ordinance

17. Angle of parking spaces
18. Parking space dimensions and aisle widths
19. Driveway radii at the street curb line
20. Width of driveways at sidewalk and street curb line
21. Provision of handicapped parking spaces
22. Dimensions of handicapped parking spaces
23. Depressed ramps available to handicapped parking spaces
24. Location, dimensions and elevations of freestanding signs
25. Location and elevations of trash enclosures
26. Provision for required screening, if applicable
27. Exterior lighting plans showing:
    a. Location, height, intensity and fixture type of all proposed exterior lighting
    b. Photometric information pertaining to locations of proposed lighting fixtures

I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

9/22/14

Record Owner Date

Applicant or Authorized Agent Date

FINDINGS OF FACT SHEET – SPECIAL USE

The St. Charles Zoning Ordinance requires the Plan Commission to consider the factors listed below in making a recommendation to the City Council.

As the applicant, the "burden of proof" is on you to show how your proposed Special Use will comply with each of the applicable standards. Therefore, you need to "make your case" by explaining specifically how your project meets each of the following standards.

600 S. Randall Rd.
Project Name or Address

9/23/2014
Date

From the Charles Zoning Ordinance, Section 17.04.430.C.2:
No Special Use or amendment to Special Use shall be recommended by the Plan Commission unless it finds that the proposed Special Use or amendment to Special Use will conform with each of these standards. The Plan Commission shall submit its written findings together with its recommendations to the City Council after the conclusion of the Public Hearing, and also may recommend such conditions as it may deem necessary to ensure conformance with these standards.

On the basis of the evidence presented at the public hearing, the Plan Commission shall record its reasons for recommending approval or denial of the petition (findings of fact) in accordance with the following standards:

A. Public Convenience: The Special Use will serve the public convenience at the proposed location.

The proposed development includes new restaurants and retail shops that will contribute to the availability of new goods and service to the residents of the city and the public..

B. Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.

The proposed development, as depicted on the attached plans, will be served with new utility connections for water, sanitary sewer, storm sewer, and electric service through the existing utility infrastructure or upgraded facilities that will be concurrently constructed with the project. A traffic study has been provided addressing the access to the property.

C. Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.

The proposed development will demonstrate significant reinvestment into a site presently occupied by an older building and will re-position new uses consistent with the zoning district. The inclusion of new business activity will have a positive impact on the surrounding neighborhood.

D. Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The subject site is zoned BC -Community Business, and the proposed use of a coffee shop and retail stores are approved uses within the BC -Community Business zoning district. The property is already developed and has been utilized for similar purposes in the past and will not impede any development or improvement of the surrounding property for uses permitted in the district.

E. Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.

The granting of this special use will enhance the general welfare of the community given the significant investment that will occur as part of this process, increasing the property value of the subject property as well as enhancing the area as a whole. There will be no detrimental effects to the health, safety, comfort or welfare of the community.

F. Conformance with Codes: That the proposed Special Use conforms to all existing Federal, State and local legislation and regulation and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.

As depicted in the enclosed plans, the proposed special use conforms to applicable provisions of the zoning ordinance and other governing regulations.

CITY OF ST. CHARLES

TWO EAST MAIN STREET
ST. CHARLES, ILLINOIS 60174-1984

COMMUNITY DEVELOPMENT/PLANNING DIVISION PHONE: (630) 377-4443 FAX: (630) 377-4062

MINOR CHANGE TO PUD APPLICATION

Received Date
RECEIVED
St. Charles, IL
SEP 26 2014
CDD
Planning Division

CITYVIEW	
Project Name:	600-660 Randall Rd.
Project Number:	2014 -PR- 008
Application No.	2014 -AP- 032

Instructions:

A Minor Change to PUD is one that modifies an approved PUD Preliminary Plan in a manner that complies with all standards of the Special Use for PUD Ordinance applicable to the property and meets the definition of a Minor Change as contained either in Section 17.04.430 of the Zoning Ordinance or the Special Use for PUD Ordinance.

To request approval of a Minor Change, complete this application and submit it with all required attachments to the Planning Division. When the application is complete, City staff will schedule a review by the Planning and Development Committee of the City Council. The Committee's recommendation will be forwarded to the City Council for final action.

The information you provide must be complete and accurate. If you have a question please call the Planning Division and we will be happy to assist you.

1. Property Information:	Parcel Number (s): 09-33-302-001-0000	
	Street Address (or common location if no address is assigned): 600-660 Randall Rd.	
2. Applicant Information:	Name Dyn Rote, L.L.C.	Phone 815-229-3000
	Address 6801 Spring Creek Rd. Rockford, IL 61114	Fax 815-229-3001
		Email marvin@firstrockford.com
3. Record Owner Information:	Name Same as Applicant	Phone
	Address	Fax
		Email
4. Billing: *To whom should costs for this application be billed?*	Name Same as Applicant	Phone
	Address	Fax
		Email

INFORMATION FOR PROPOSED MINOR CHANGE:

NAME OF PUD: 600-660 S. Randall Road – Randall Shoppes

PUD ORDINANCE #: _____

Identify Specific PUD Plans to be changed:

1. Reconfiguration of Parking Lot and as a result, modification of the landscape plan.
2. Modification to the building elevations and footprint.
3. _____

Description of Proposed Changes:

Starbucks has requested to occupy space within the premises with a drive through. This requires a modification of the parking lot layout and modification to the building elevation to accommodate their signature style and signage. The drive through will result in a bump out of 81 square feet along the north wall of the building.

Attachment Checklist

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- ❑ **APPLICATION FEE:** Application fee in accordance with Appendix B of the Zoning Ordinance.
- ❑ **REIMBURSEMENT OF FEES AGREEMENT:** An original, executed Reimbursement of Fees Agreement and deposit of funds in escrow with the City, as provided by Appendix B of the Zoning Ordinance.
- ❑ **PROOF OF OWNERSHIP and DISCLOSURE:**

  a) a current title policy report; or

  b) a deed and a current title search.

  If the owner is not the applicant, an original letter of authorization from the owner permitting the applicant to act on his/her behalf is required. If the owner or applicant is a Trust, a disclosure of all beneficiaries; if the owner or applicant is a Partnership, a disclosure of all partners; if the owner or applicant is a Corporation, a disclosure of all owners with an interest of at least ten percent (10%).
- ❑ **LEGAL DESCRIPTION:** For entire subject property, on 8 ½ x 11 inch paper
- ❑ **PLAT OF SURVEY:**

  A current plat of survey for the Subject Realty showing all existing improvements on the property, prepared by a registered Illinois Professional Land Surveyor.
- ❑ **COVER LETTER:** describing the proposed minor change requested, why it is necessary, and how it is different from the currently approved plan.

- **PLANS:**

All required plans shall be drawn on sheets no larger than 24" x 36", unless the Director of Community Development permits a larger size when necessary to show a more comprehensive view of the project. All required plans shall show north arrow and scale, and shall be drawn at the same scale (except that a different scale may be used to show details or specific features). All plans shall include the name of the project, developer or owner of site, person or firm preparing the plan, and the date of plan preparation and all revisions.

Copies of Plans:

- Initial Submittal - Fifteen (15) full size copies, Three (3) 11" by 17", and a PDF electronic file on a CD-ROM.

Plans Shall include the following:

- Site Plan indicating location of proposed change.
- Existing streets on and adjacent to the tract.
- Architectural elevations showing existing/approved and proposed building design, color and materials (if applicable)
- If change is proposed to landscaping, show approved and proposed drawings, indicate species and quantities of plant material to replace existing/approved materials.

Additional information may be necessary depending on the specific change proposed.

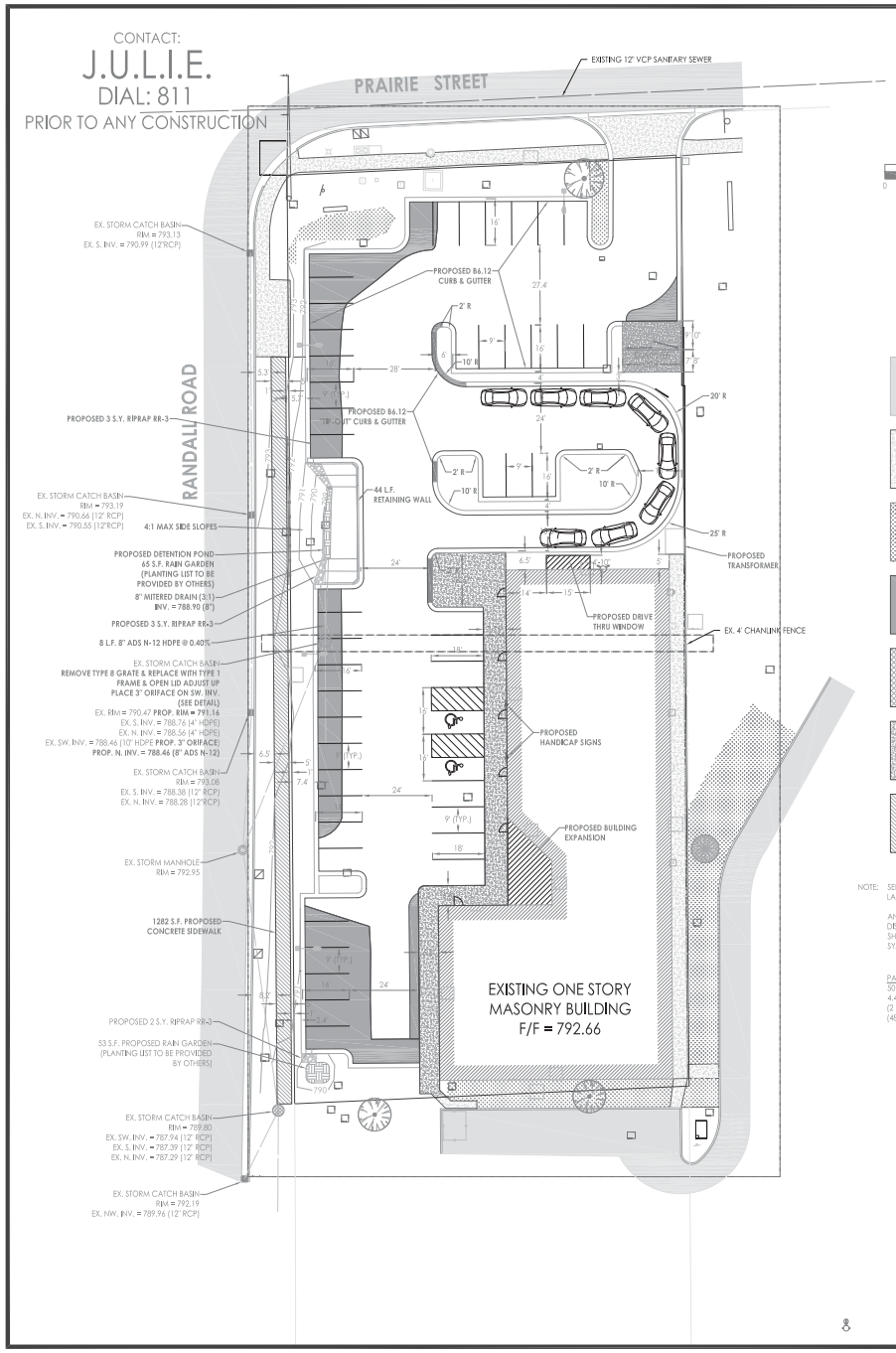
I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.

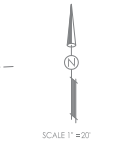
9/22/14

Record Owner Date

Applicant or Authorized Agent Date

CONTACT:
J.U.L.I.E.
DIAL: 811
PRIOR TO ANY CONSTRUCTION





PAVEMENT LEGEND

- EX. HMA PAVEMENT
- EX. CONCRETE PAVEMENT/SIDEWALK
- EX. LANDSCAPED AREA
- PROPOSED HMA PAVEMENT (FULL DEPTH)
- PROPOSED HMA PAVEMENT (AGG. BASE PREP., AGG. BASE VARIABLE & HMA)
- PROPOSED THICKENED EDGE CONCRETE SIDEWALK
- PROPOSED CONCRETE SIDEWALK

NOTE: SEE LANDSCAPING PLAN BY OTHERS FOR LANDSCAPING REQUIREMENTS

ANY STORM PIPE/DOWNSPOUTS DISTURBED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE STORM SYSTEM.

PARKING SCHEDULE
50 TOTAL PARKING SPACES
4.41 PARKING SPACES PER 1000 S.F. OF BUILDING
(2 HANDICAP SPACES)
(48 NORMAL SPACES)

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF ST. CHARLES STANDARDS.

THICKENED EDGE P.C. CONCRETE SIDEWALK (4 "), P.C. CONCRETE SIDEWALK (4")

THIS WORK SHALL CONFORM TO SECTION 424 OF THE STANDARD SPECIFICATIONS.

SURFACE SHALL BE SCORED IN FIVE (5) FOOT SQUARES WITH A DIRECTIONAL BROOM FINISH. TROWEL JOINTS, WHICH ARE AT RIGHT ANGLES TO THE EDGE OF THE WALK, SHOULD BE PLACED AT FIVE FOOT INTERVALS. THESE JOINTS SHALL BE AT LEAST 1-1/2 INCHES DEEP AND NOT LESS THAN 1/8 INCHES WIDE, BUT NO MORE THAN 1/4 INCH WIDE. THE CONCRETE SHALL BE STRUCK OFF, CONSOLIDATED, AND FINISHED TO A TRUE AND EVEN SURFACE. CONSOLIDATIONS SHALL BE BY VIBRATION WITH A VIBRATORY SCREED.

EXPANSION JOINTS (3/4 INCH) SHALL BE PLACED IN THE SIDEWALKS AT INTERVALS OF 40 FEET. THEY SHALL ALSO BE PLACED BETWEEN THE NEW SIDEWALKS AND THE EXISTING PAVEMENTS. ASPHALT JOINTS OR FIBER JOINTS WITH RUBBER JOINT SEALER MAY BE USED. EXPANSION JOINTS (½ INCH) SHALL BE PLACED BETWEEN ALL EXISTING STRUCTURES AND THE NEW SIDEWALKS.

SIDEWALKS SHALL BE 4 INCHES THICK PER TYPICAL SECTION ON SHEET 3 OF THE CONSTRUCTION DRAWINGS. A COMPACTED SUB-BASE SHALL BE BENEATH ALL SIDEWALK CONSTRUCTION AND IS INCIDENTAL TO THIS ITEM AND NO EXTRA COMPENSATION WILL BE AWARDED.

CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH ARTICLE 1022 OF THE STANDARD SPECIFICATIONS.

EARTH EXCAVATION SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS, INCLUDING EXCAVATION AND REMOVAL OF EARTH AND AGGREGATE MATERIALS. WHERE SIDEWALKS DO NOT EXIST CURRENTLY, AND GRADE TO ELEVATIONS AS DESIGNATED ON THE DRAWINGS.

RESTORATION ADJACENT TO THE PROPOSED SIDEWALK AND NOT SHOWN ON THESE PLANS (INCLUDING TOPSOIL, SEEDING AND MULCH) SHALL BE INCIDENTAL TO THE PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THESE ITEMS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR **THICKENED EDGE PORTLAND CEMENT CONCRETE SIDEWALK 4"** AND **P.C.C. CONCRETE SIDEWALK (4")** PRICE SHALL INCLUDE SUBGRADE PREPARATION.

4" TOPSOIL, CLASS 1A SEEDING, & MULCH METHOD 2 OR EROSION CONTROL BLANKET

THIS WORK SHALL CONSIST OF REPAIRING ALL DISTURBED AREAS WITH 4" OF TOPSOIL. TOPSOIL MATERIAL SHALL BE INDIGENOUS TO KANE COUNTY AND MAY BE USED PROVIDING IT MEETS WITH THE REQUIREMENTS OF ARTICLE 1081.05 OF THE STANDARD SPECIFICATIONS EROSION CONTROL BLANKET WORK SHALL CONSIST OF FURNISHING, TRANSPORTING, AND PLACING EROSION BLANKET, OVER SEEDED AREAS IN ACCORDANCE WITH IDOT SECTION 251 WITHIN 24 HOURS AFTER SEEDING OPERATIONS.

ALL TURF OR GRASS LAWN AREAS, NOT DESIGNATED FOR INSTALLATION OF NEW SIDEWALK, LANDSCAPING PLAN BY OTHERS, DRIVEWAY OR DISTURBED DURING CONSTRUCTION, SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER. RESTORATION OF THE PROJECT AREA SHALL BE COMPLETED ON A MONTHLY BASIS. RESTORATION SHALL INCLUDE BACKFILLING THE AREAS WITH SUITABLE EMBANKMENT MATERIAL AND A MINIMUM OF 4" OF TOPSOIL IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS. FINAL SHAPING, TRIMMING, AND FINISHING SHALL BE IN ACCORDANCE WITH SECTION 212 OR THE STANDARD SPECIFICATIONS. SEEDING SHALL BE A CLASS 1A SALT TOLERANT LAWN MIXTURE IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. MULCH METHOD 2 SHALL BE INSTALLED OVER ALL RESTORED AREAS IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS. MODIFY SECTION 250.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO INCLUDE THE CONTRACTOR GUARANTEE A 75 PERCENT UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA(S) AFTER ONE GROWING SEASON. WITH NO EXCEPTION TO THE TIMING OF THE SEEDING. AFTER ONE GROWING SEASON, AREAS NOT SUSTAINING 75 PERCENT UNIFORM GROWTH SHALL BE INTERSEEDED OR RESEEDED, AS DETERMINED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE CONTRACT.

GUARANTEE: ALL SEEDED AREAS SHALL BE MAINTAINED AS SPECIFIED INCLUDING WATERING FOR 30 DAYS AFTER INSTALLATION. SCATTERED BARE SPOTS NO LARGER THAN TWO SQUARE FOOT WILL BE ALLOWED UP TO A MAXIMUM OF 5% OF ANY SEEDED AREA. LARGER AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL BE PAID INCIDENTAL TO THE PRICE BID PER HMA PAVEMENT.

EROSION AND SEDIMENT CONTROL

THIS ITEM INCLUDES FURNISHING ALL LABOR AND MATERIALS REQUIRED TO INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL ITEMS FOR THE DURATION OF THE PROJECT. EROSION CONTROL ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO SILT FENCE, TEMPORARY DITCH CHECK, INLET PROTECTION, AND RIPRAP. PRIOR TO DISTURBING THE SITE PERIMETER SILT FENCE SHALL BE INSTALLED AS INDICATED ON PLANS. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND INSTALL EROSION AND SEDIMENT CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SEDIMENT AND EROSION CONTROL PLAN, AS WELL AS PER IDNR, USACE AND IEOT INCORPORATED BY REFERENCE IN THIS DOCUMENT. THE ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL ALSO MAINTAIN NECESSARY INSPECTIONS AND DOCUMENTATION TO SATISFY SWPPP REQUIREMENTS OF THE EPA PER GENERAL NPDES PERMIT NO. ILR10.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE OF LINEAR FEET FOR **SILT FENCE**, PER EACH FOR **INLET PROTECTION** AND LUMP SUM FOR **EROSION AND SEDIMENT CONTROL MAINTENANCE.**

AGGREGATE BASE COURSE, TYPE B, 10"

THIS WORK SHALL CONFORM TO SECTION 351 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR **AGGREGATE BASE COURSE, TYPE B, 10".**

EX. AGGREGATE BASE PREP

THE CONTRACTOR SHALL PREPARE THE EXISTING AGGREGATE BASE, INCLUDING A VARIABLE DEPTH OF AGGREGATE BASE COURSE, TYPE B TO CONSTRUCT THE PARKING LOT TO THE PROPOSED GRADES.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR **EX. AGGREGATE BASE PREP.**

BITUMINOUS MATERIALS (PRIME COAT)

ASPHALT MC-30 SHALL BE USED FOR CONSTRUCTING THIS ITEM AND SHALL BE APPLIED AT THE RATE WITHIN THE LIMITS SPECIFIED IN THE STANDARD SPECIFICATIONS OR AS SPECIFIED BY THE ENGINEER. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER GALLON FOR **BITUMINOUS MATERIALS (PRIME COAT)**. CONTRACTOR SHALL PROVIDE TRUCK TICKETS PRIOR TO PAYMENT FOR THIS ITEM.

HOT MIX ASPHALT SURFACE COURSE, MIX C, N50, 1.5"

HOT MIX ASPHALT BINDER COURSE, N50, 1.5"

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS. HOT MIX ASPHALT SURFACE COURSE, MIX C, N50 & BINDER COURSE, N50.

VIBRATING ROLLERS WILL NOT BE ALLOWED UNLESS SPECIFIED BY THE ENGINEER. IN THE ABSENCE OF A VIBRATORY ROLLER, DENSITIES SHALL BE 93% MINIMUM UNLESS SPECIFIED BY THE ENGINEER.

IN SECTION 406.06 G THE PARAGRAPH STARTING WITH "JOINTS BETWEEN OLD AND NEW PAVEMENT..." SHALL BE MODIFIED TO READ: JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAY'S WORK OR WHEN THE TEMPERATURES OF THE PREVIOUSLY LAID MATERIALS DROPS BELOW 150 DEGREES, TO INSURE THOROUGH AND CONTINUOUS BOND, THE CONTACT SURFACE SHALL BE SPRAYED OR PAINTED WITH A THIN, UNIFORM COATING OF ASPHALT SS-1.

BASIS OF PAYMENT SHALL BE SQUARE YARD FOR **HOT MIX ASPHALT SURFACE COURSE, MIX C, N50, 1.5" & HOT MIX ASPHALT BINDER COURSE, N50, 1.5"**. *RECYCLED MATERIAL WILL NOT BE ALLOWED.*

WHITE PAINT PAVEMENT MARKING, 4"

THIS WORK SHALL CONFORM TO SECTION 780 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PAINT SHALL BE INSTALLED WHEN AIR TEMPERATURE IS 50° F OR ABOVE AND RISING

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **WHITE PAINT PAVEMENT MARKING, 4".**

P.C. CONCRETE CURB, TYPE B6.12

CURB & GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE I.D.O.T. STANDARD SPECIFICATIONS. THE CONCRETE CURB & GUTTER SHALL BE TYPE B6.12 UNLESS DETAILED OTHERWISE IN THE CONSTRUCTION PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB. THE CONCRETE SHALL BE CLASS 3I. IT SHALL HAVE AN AIR CONTENT OF NOT LESS THAN 5% NOR MORE THAN 7% OF THE VOLUME OF THE CONCRETE. IT SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS. TEST CYLINDERS SHALL BE TAKEN AND THE CERTIFIED COMPRESSION TEST RESULTS SUBMITTED TO THE CITY ENGINEER.

REINFORCING BARS SHALL BE RUN CONTINUOUSLY THROUGH ITS LENGTH, EXCEPT AT EXPANSION JOINTS. AT EACH EXPANSION JOINT PROVIDE TWO 18" LONG No. 6 SMOOTH BARS WITH EXPANSION CAPS AND 3/4" PREMOLDED, NON-EXTRUDING JOINT FILLER. EXPANSION JOINTS ARE TO BE PROVIDED AT ALL RADIUS POINTS, 5' TO 10' EITHER SIDE OF STRUCTURES AND 100' INTERVALS.

CONTRACTION JOINTS SHALL BE SAWED AT A MAXIMUM OF TEN FEET (10') SPACING. THE CONTRACTION JOINTS SHALL BE CUT IN THE UPPER 1/3 OF CURBS AND GUTTERS WITHIN 24 HOURS OF PLACEMENT.

ALL CURB AND GUTTER SHALL BE BROOM FINISHED. FINISHED SURFACES OF ALL NEWLY CONSTRUCTED CURB AND GUTTER SHALL BE COATED WITH ANTI-SPALL AND CURING COMPOUND APPROVED BY THE CITY ENGINEER.

CURING AND PROTECTION OF ALL EXPOSED CONCRETE SURFACES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. NO HONEYCOMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

CURB SPILLOUTS AND CURB GRADING DETAIL SHALL BE INCIDENTAL TO THIS PAY ITEM.

BACKFILLING OF CURBS SHALL BE COMPLETED PRIOR TO PLACEMENT OF ROADWAY BASE-COURSE.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **P.C. CONCRETE CURB & GUTTER, B6.12.**

SIGN PANELS

THIS WORK SHALL CONSIST OF FURNISHING, FABRICATING, AND/OR INSTALLING SIGN PANELS.

ALL SIGNAGE SHALL BE IN ACCORDANCE WITH MUTCD AND IDOT STANDARDS.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH **SIGN**.

METAL POST, TYPE B

THIS WORK SHALL CONSIST OF FURNISHING TYPE B METAL POST AND INSTALLING THEM UTILIZING THE DIRECT BURIAL METHOD. ALL POST SHALL BE IN ACCORDANCE WITH IDOT STANDARDS.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **METAL POST, TYPE B.**

SPECIAL EXCAVATION

THIS WORK SHALL CONFORM TO SECTION 202 AND 205 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED 2013 (HERE AFTER CALLED "STANDARD SPECIFICATIONS"), INCLUDING EXCAVATION AND REMOVAL OF EARTH AND EXISTING PAVEMENT INCLUDING SAWCUTTING (BITUMINOUS AND CONCRETE), AGGREGATE BASE, CURB AND GUTTER, SIDEWALK, MEDIANS AND REMOVAL OF VARIOUS SITE ITEMS SUCH AS CULVERTS, FENCES, GUARD RAILS, ROCKS, OR TIMBER RETAINING WALLS, AND GRADING TO DESIGN ELEVATIONS AS DESIGNATED ON THE DRAWINGS.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR **SPECIAL EXCAVATION.**

STORM SEWER, ADS N-12

STORM SEWERS UNDER THIS ITEM SHALL BE ADS N-12 SEWER PIPE. MATERIALS SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATIONS M252 (3"-10").

THIS ITEM INCLUDE SEWER PIPE, GRANULAR PIPE BEDDING, GRANULAR BACKFILL, PLUGS, JOINT MATERIALS, AND ANY OTHER INCIDENTAL COSTS NOT SPECIFICALLY INCLUDED FOR PAYMENT UNDER OTHER ITEMS.

ALL PIPE AND JOINTS SHALL BE TESTED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH THE MOST RECENT CITED STANDARD METHODS OF AASHTO OR ASTM AT THE CONTRACTOR'S EXPENSE. TWO COPIES OF EACH TEST CERTIFICATE SHALL BE PROMPTLY FURNISHED TO THE ENGINEER.

WHERE UNSUITABLE SOIL IS ENCOUNTERED, FOUNDATION MATERIAL UNDER PIPE BEDDING OF 6" WELL GRADED, DURABLE GRAVEL, CRUSHED STONE, OR SLAG WILL BE REQUIRED. TRENCH BACKFILL TO THE SUBGRADE ELEVATION ABOVE THE TOP OF THE PIPE WILL BE REQUIRED ON PIPE UNDER ROADWAY AREAS. THESE ITEMS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR **STORM SEWER, ADS N-12**, OF THE DIAMETER SPECIFIED.

DETENTION POND/RAIN GARDEN

THIS WORK SHALL CONSIST OF ALL MATERIALS REQUIRED TO COMPLETE CONSTRUCTION OF THE BIOINFILTRATION AREA INCLUDING: WORK SHALL CONFORM TO SECTIONS 202, 254, 280, 281 & 1004 OF THE STANDARD SPECIFICATIONS.

TEMPORARY COVER SHALL CONSISTS OF EROSION CONTROL MATERIALS THAT PROVIDE SHORT-TERM PROTECTION OF DISTURBED SOIL AREAS. THEY SHALL BE COMPOSED OF BIODEGRADABLE MATERIALS WITH VARIABLE LONGEVITY.

WORK TO BE PERFORMED DURING THE FIRST YEAR OF THE PLANT ESTABLISHMENT PERIOD SHALL BE DONE BY THE CONTRACTOR AND INCLUDE THE FOLLOWING:

1. WEED CONTROL AND REMOVAL OF INAPPROPRIATE PLANT SPECIES.
2. MOWING AND OTHER VEGETATION MANAGEMENT.
3. REPAIR OF RILLS, GULLIES, AND OTHER DAMAGE CAUSED BY EROSION AND SCOUR.
4. RESEEDING OR PLANTING OF BARE OR REPAIRED AREAS.
5. REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS.
6. ADDITIONAL PLANTING.
7. ADDITIONAL IRRIGATION, AND
8. MONITORING OF PLANT GROWTH AND ESTABLISHMENT.

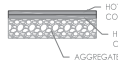
NEAR 100% COVERAGE SHOULD BE POSSIBLE AFTER THE SECOND GROWING SEASON.

PLANT BULBS SHALL BE PLANTED AT THE LOCATIONS AS DIRECTED BY THE OWNER.

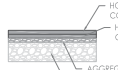
THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID PER SQUARE FOOT FOR **RAIN GARDEN.**

TYPICAL SECTION
CONCRETE SIDEWALK

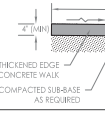
TYPICAL SECTION HMA PAVEMENT
(FULL DEPTH)



TYPICAL SECTION HMA PAVEMENT



TYPICAL SECTION
THICKENED EDGE SIDEWALK



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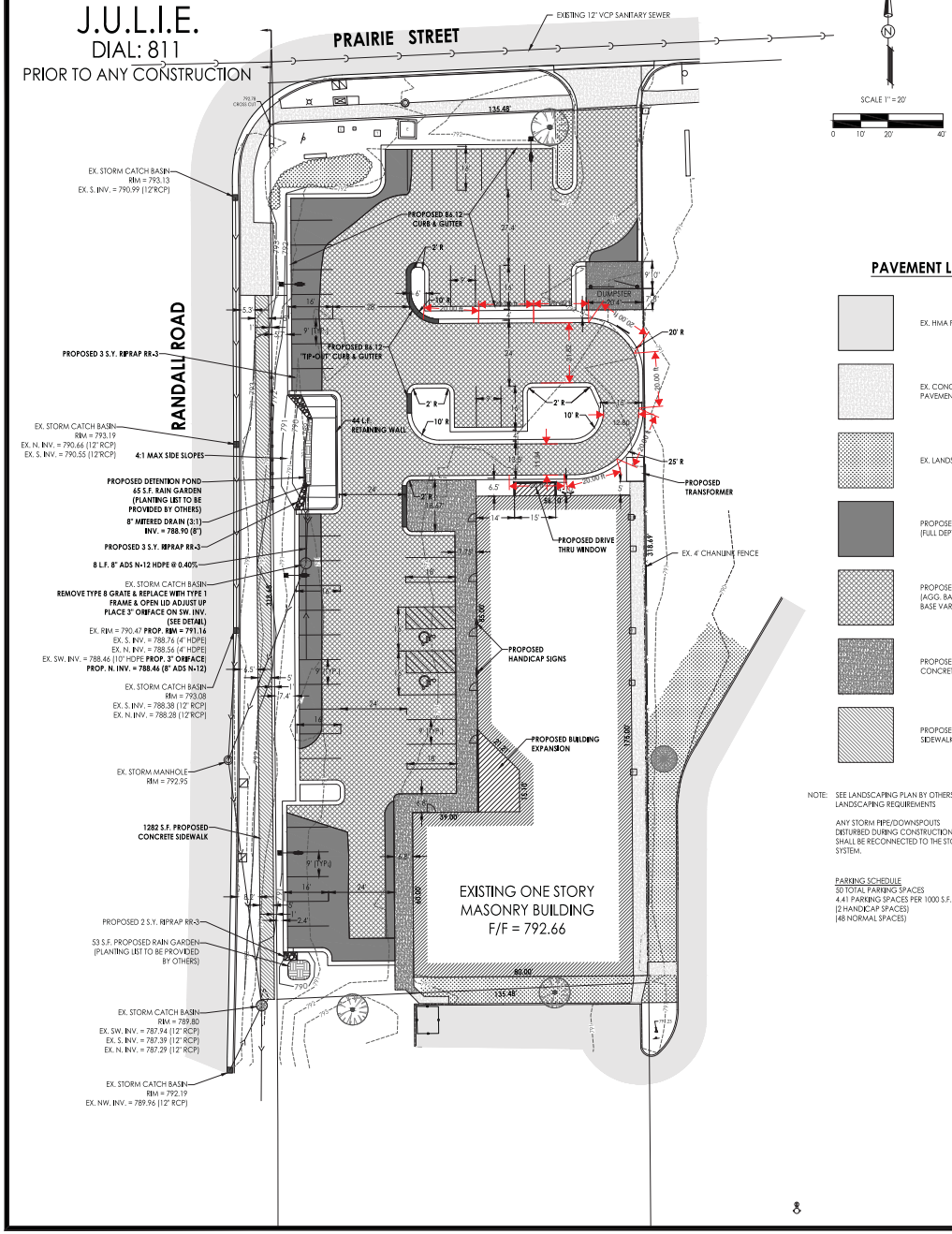
ILLINOIS DESIGN FIRM NO. 184-001260

Date	Revision	By
7/8/14	REVISIONS PER CITY (LETTER DATED 7/3/2014)	JAB
7/18/14	REVISIONS PER CLIENT	JAB
8/26/14	REVISIONS PER CITY (LETTER DATED 8/15/2014)	JAB

600-660 S. Randall Road
Overall Site Plan

CHECKED BY: KCB
DATE: 06/30/14
DRAWN BY: JAB
DATE: 06/30/14
3602_BASE.dwg

CONTACT:
J.U.L.I.E.
DIAL: 811
PRIOR TO ANY CONSTRUCTION



PAVEMENT LEGEND

- EX. HMA PAVEMENT
- EX. CONCRETE PAVEMENT/SIDEWALK
- EX. LANDSCAPED AREA
- PROPOSED HMA PAVEMENT (FULL DEPTH)
- PROPOSED HMA PAVEMENT (AGG. BASE PREP., AGG. BASE VARIABLE & HMA)
- PROPOSED THICKENED EDGE CONCRETE SIDEWALK
- PROPOSED CONCRETE SIDEWALK

NOTE: SEE LANDSCAPING PLAN BY OTHERS FOR LANDSCAPING REQUIREMENTS

ANY STORM PIPE/DOWNSPOUTS DISTURBED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE STORM SYSTEM.

PARKING SCHEDULE
50 TOTAL PARKING SPACES
4.41 PARKING SPACES PER 1000 S.F. OF BUILDING
(2 HANDICAP SPACES)
(48 NORMAL SPACES)

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF ST. CHARLES STANDARDS.

THICKENED EDGE P.C. CONCRETE SIDEWALK (4 "), P.C. CONCRETE SIDEWALK (4")

THIS WORK SHALL CONFORM TO SECTION 424 OF THE STANDARD SPECIFICATIONS.

SURFACE SHALL BE SCORED IN FIVE (5) FOOT SQUARES WITH A DIRECTIONAL BROOM FINISH. TROWEL JOINTS, WHICH ARE AT RIGHT ANGLES TO THE EDGE OF THE WALK, SHOULD BE PLACED AT FIVE FOOT INTERVALS. THESE JOINTS SHALL BE AT LEAST 1-1/2 INCHES DEEP AND NOT LESS THAN 1/8 INCHES WIDE, BUT NO MORE THAN 1/4 INCH WIDE. THE CONCRETE SHALL BE STRUCK OFF, CONSOLIDATED, AND FINISHED TO A TRUE AND EVEN SURFACE. CONSOLIDATIONS SHALL BE BY VIBRATION WITH A VIBRATORY SCREED.

EXPANSION JOINTS (3/4 INCH) SHALL BE PLACED IN THE SIDEWALKS AT INTERVALS OF 40 FEET. THEY SHALL ALSO BE PLACED BETWEEN THE NEW SIDEWALKS AND THE EXISTING PAVEMENTS. ASPHALT JOINTS OR FIBER JOINTS WITH RUBBER JOINT SEALER MAY BE USED. EXPANSION JOINTS (½ INCH) SHALL BE PLACED BETWEEN ALL EXISTING STRUCTURES AND THE NEW SIDEWALKS.

SIDEWALKS SHALL BE 4 INCHES THICK PER TYPICAL SECTION ON SHEET 3 OF THE CONSTRUCTION DRAWINGS. A COMPACTED SUB-BASE SHALL BE BENEATH ALL SIDEWALK CONSTRUCTION AND IS INCIDENTAL TO THIS ITEM AND NO EXTRA COMPENSATION WILL BE AWARDED.

CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH ARTICLE 1022 OF THE STANDARD SPECIFICATIONS.

EARTH EXCAVATION SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS, INCLUDING EXCAVATION AND REMOVAL OF EARTH AND AGGREGATE MATERIALS, WHERE SIDEWALKS DO NOT EXIST CURRENTLY, AND GRADE TO ELEVATIONS AS DESIGNATED ON THE DRAWINGS.

RESTORATION ADJACENT TO THE PROPOSED SIDEWALK AND NOT SHOWN ON THESE PLANS (INCLUDING TOPSOIL, SEEDING AND MULCH) SHALL BE INCIDENTAL TO THE PORTLAND CEMENT CONCRETE SIDEWALK 5-INCH AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THESE ITEMS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR **THICKENED EDGE PORTLAND CEMENT CONCRETE SIDEWALK 4"** AND **P.C.C. CONCRETE SIDEWALK (4")** PRICE SHALL INCLUDE SUBGRADE PREPARATION.

4" TOPSOIL, CLASS 1A SEEDING, & MULCH METHOD 2 OR EROSION CONTROL BLANKET

THIS WORK SHALL CONSIST OF REPAIRING ALL DISTURBED AREAS WITH 4" OF TOPSOIL. TOPSOIL MATERIAL SHALL BE INDIGENOUS TO KANE COUNTY AND MAY BE USED PROVIDING IT MEETS WITH THE REQUIREMENTS OF ARTICLE 1081.05 OF THE STANDARD SPECIFICATIONS EROSION CONTROL BLANKET WORK SHALL CONSIST OF FURNISHING, TRANSPORTING, AND PLACING EROSION BLANKET, OVER SEEDED AREAS IN ACCORDANCE WITH IDOT SECTION 251 WITHIN 24 HOURS AFTER SEEDING OPERATIONS.

ALL TURF OR GRASS LAWN AREAS, NOT DESIGNATED FOR INSTALLATION OF NEW SIDEWALK, LANDSCAPING PLAN BY OTHERS, DRIVEWAY OR DISTURBED DURING CONSTRUCTION, SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER. RESTORATION OF THE PROJECT AREA SHALL BE COMPLETED ON A MONTHLY BASIS. RESTORATION SHALL INCLUDE BACKFILLING THE AREAS WITH SUITABLE EMBANKMENT MATERIAL AND A MINIMUM OF 4" OF TOPSOIL IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS. FINAL SHAPING, TRIMMING, AND FINISHING SHALL BE IN ACCORDANCE WITH SECTION 212 OR THE STANDARD SPECIFICATIONS. SEEDING SHALL BE A CLASS 1A SALT TOLERANT LAWN MIXTURE IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. MULCH METHOD 2 SHALL BE INSTALLED OVER ALL RESTORED AREAS IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS. MODIFY SECTION 250.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO INCLUDE THE CONTRACTOR GUARANTEE A 75 PERCENT UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA(S) AFTER ONE GROWING SEASON, WITH NO EXCEPTION TO THE TIMING OF THE SEEDING. AFTER ONE GROWING SEASON, AREAS NOT SUSTAINING 75 PERCENT UNIFORM GROWTH SHALL BE INTERSEEDED OR RESEEDED, AS DETERMINED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE CONTRACT.

GUARANTEE: ALL SEEDED AREAS SHALL BE MAINTAINED AS SPECIFIED INCLUDING WATERING FOR 30 DAYS AFTER INSTALLATION. SCATTERED BARE SPOTS NO LARGER THAN TWO SQUARE FOOT WILL BE ALLOWED UP TO A MAXIMUM OF 5% OF ANY SEEDED AREA. LARGER AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL BE PAID INCIDENTAL TO THE PRICE BID PER HMA PAVEMENT.

EROSION AND SEDIMENT CONTROL

THIS ITEM INCLUDES FURNISHING ALL LABOR AND MATERIALS REQUIRED TO INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL ITEMS FOR THE DURATION OF THE PROJECT. EROSION CONTROL ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO SILT FENCE, TEMPORARY DITCH CHECK, INLET PROTECTION, AND RIPRAP. PRIOR TO DISTURBING THE SITE PERIMETER SILT FENCE SHALL BE INSTALLED AS INDICATED ON PLANS. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND INSTALL EROSION AND SEDIMENT CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SEDIMENT AND EROSION CONTROL PLAN, AS WELL AS PER IDNR, USACE AND IDOT INCORPORATED BY REFERENCE IN THIS DOCUMENT. THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL ALSO MAINTAIN NECESSARY INSPECTIONS AND DOCUMENTATION TO SATISFY SWPPP REQUIREMENTS OF THE EPA PER GENERAL NPDES PERMIT NO. ILR10.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE OF LINEAR FEET FOR **SILT FENCE**, PER EACH FOR **INLET PROTECTION** AND LUMP SUM FOR **EROSION AND SEDIMENT CONTROL MAINTENANCE**.

AGGREGATE BASE COURSE, TYPE B, 10"

THIS WORK SHALL CONFORM TO SECTION 351 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR **AGGREGATE BASE COURSE, TYPE B, 10"**.

EX. AGGREGATE BASE PREP

THE CONTRACTOR SHALL PREPARE THE EXISTING AGGREGATE BASE, INCLUDING A VARIABLE DEPTH OF AGGREGATE BASE COURSE, TYPE B TO CONSTRUCT THE PARKING LOT TO THE PROPOSED GRADES.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR **EX. AGGREGATE BASE PREP**.

BITUMINOUS MATERIALS (PRIME COAT)

ASPHALT MC-30 SHALL BE USED FOR CONSTRUCTING THIS ITEM AND SHALL BE APPLIED AT THE RATE WITHIN THE LIMITS SPECIFIED IN THE STANDARD SPECIFICATIONS OR AS SPECIFIED BY THE ENGINEER. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER GALLON FOR **BITUMINOUS MATERIALS (PRIME COAT)**. CONTRACTOR SHALL PROVIDE TRUCK TICKETS PRIOR TO PAYMENT FOR THIS ITEM.

HOT MIX ASPHALT SURFACE COURSE, MIX C, N50, 1.5"

HOT MIX ASPHALT BINDER COURSE, N50, 1.5"

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS. HOT MIX ASPHALT SURFACE COURSE, MIX C, N50 & BINDER COURSE, N50.

VIBRATING ROLLERS WILL NOT BE ALLOWED UNLESS SPECIFIED BY THE ENGINEER. IN THE ABSENCE OF A VIBRATORY ROLLER, DENSITIES SHALL BE 93% MINIMUM UNLESS SPECIFIED BY THE ENGINEER.

IN SECTION 406.06 G THE PARAGRAPH STARTING WITH "JOINTS BETWEEN OLD AND NEW PAVEMENT..." SHALL BE MODIFIED TO READ: JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAYS WORK OR WHEN THE TEMPERATURES OF THE PREVIOUSLY LAID MATERIALS DROPS BELOW 150 DEGREES, TO INSURE THOROUGH AND CONTINUOUS BOND. THE CONTACT SURFACE SHALL BE SPRAYED OR PAINTED WITH A THIN, UNIFORM COATING OF ASPHALT SS-1.

BASIS OF PAYMENT SHALL BE SQUARE YARD FOR **HOT MIX ASPHALT SURFACE COURSE, MIX C, N50, 1.5" & HOT MIX ASPHALT BINDER COURSE, N50, 1.5"**. *RECYCLED MATERIAL WILL NOT BE ALLOWED.*

WHITE PAINT PAVEMENT MARKING, 4"

THIS WORK SHALL CONFORM TO SECTION 780 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PAINT SHALL BE INSTALLED WHEN AIR TEMPERATURE IS 50° F OR ABOVE AND RISING

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **WHITE PAINT PAVEMENT MARKING, 4"**.

P.C. CONCRETE CURB, TYPE B6.12

CURB & GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE I.D.O.T. STANDARD SPECIFICATIONS. THE CONCRETE CURB & GUTTER SHALL BE TYPE B6.12 UNLESS DETAILED OTHERWISE IN THE CONSTRUCTION PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB. THE CONCRETE SHALL BE CLASS SI. IT SHALL HAVE AN AIR CONTENT OF NOT LESS THAN 5% NOR MORE THAN 7% OF THE VOLUME OF THE CONCRETE. IT SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS. TEST CYLINDERS SHALL BE TAKEN AND THE CERTIFIED COMPRESSION TEST RESULTS SUBMITTED TO THE CITY ENGINEER.

REINFORCING BARS SHALL BE RUN CONTINUOUSLY THROUGH ITS LENGTH, EXCEPT AT EXPANSION JOINTS. AT EACH EXPANSION JOINT PROVIDE TWO 18" LONG No. 6 SMOOTH BARS WITH EXPANSION CAPS AND 3/4" PREMOLDED, NON-EXTRUDING JOINT FILLER. EXPANSION JOINTS ARE TO BE PROVIDED AT ALL RADIUS POINTS, 5' TO 10' EITHER SIDE OF STRUCTURES AND 100' INTERVALS.

CONTRACTION JOINTS SHALL BE SAWED AT A MAXIMUM OF TEN FEET (10') SPACING. THE CONTRACTION JOINTS SHALL BE CUT IN THE UPPER 1/3 OF CURBS AND GUTTERS WITHIN 24 HOURS OF PLACEMENT.

ALL CURB AND GUTTER SHALL BE BROOM FINISHED. FINISHED SURFACES OF ALL NEWLY CONSTRUCTED CURB AND GUTTER SHALL BE COATED WITH ANTI-SPALL AND CURING COMPOUND APPROVED BY THE CITY ENGINEER.

CURING AND PROTECTION OF ALL EXPOSED CONCRETE SURFACES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. NO HONEYCOMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

CURB SPILLOUTS AND CURB GRADING DETAIL SHALL BE INCIDENTAL TO THIS PAY ITEM.

BACKFILLING OF CURBS SHALL BE COMPLETED PRIOR TO PLACEMENT OF ROADWAY BASE-COURSE.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **P.C. CONCRETE CURB & GUTTER, B6.12.**

SIGN PANELS

THIS WORK SHALL CONSIST OF FURNISHING, FABRICATING, AND/OR INSTALLING SIGN PANELS.

ALL SIGNAGE SHALL BE IN ACCORDANCE WITH MUTCD AND IDOT STANDARDS.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH **SIGN**.

METAL POST, TYPE B

THIS WORK SHALL CONSIST OF FURNISHING TYPE B METAL POST AND INSTALLING THEM UTILIZING THE DIRECT BURIAL METHOD. ALL POST SHALL BE IN ACCORDANCE WITH IDOT STANDARDS.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **METAL POST, TYPE B**.

SPECIAL EXCAVATION

THIS WORK SHALL CONFORM TO SECTION 202 AND 205 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED 2013 (HERE AFTER CALLED "STANDARD SPECIFICATIONS"), INCLUDING EXCAVATION AND REMOVAL OF EARTH AND EXISTING PAVEMENT INCLUDING SAWCUTTING (BITUMINOUS AND CONCRETE), AGGREGATE BASE, CURB AND GUTTER, SIDEWALK, MEDIANS AND REMOVAL OF VARIOUS SITE ITEMS SUCH AS CULVERTS, FENCES, GUARD RAILS, ROCKS, OR TIMBER RETAINING WALLS, AND GRADING TO DESIGN ELEVATIONS AS DESIGNATED ON THE DRAWINGS.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR **SPECIAL EXCAVATION.**

STORM SEWER, ADS N-12

STORM SEWERS UNDER THIS ITEM SHALL BE ADS N-12 SEWER PIPE. MATERIALS SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATIONS M252 (3"-10").

THIS ITEM INCLUDE SEWER PIPE, GRANULAR PIPE BEDDING, GRANULAR BACKFILL, PLUGS, JOINT MATERIALS, AND ANY OTHER INCIDENTAL COSTS NOT SPECIFICALLY INCLUDED FOR PAYMENT UNDER OTHER ITEMS.

ALL PIPE AND JOINTS SHALL BE TESTED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH THE MOST RECENT CITED STANDARD METHODS OF AASHTO OR ASTM AT THE CONTRACTOR'S EXPENSE. TWO COPIES OF EACH TEST CERTIFICATE SHALL BE PROMPTLY FURNISHED TO THE ENGINEER.

WHERE UNSUITABLE SOIL IS ENCOUNTERED, FOUNDATION MATERIAL UNDER PIPE BEDDING OF 6" WELL GRADED, DURABLE GRAVEL, CRUSHED STONE, OR SLAG WILL BE REQUIRED. TRENCH BACKFILL TO THE SUBGRADE ELEVATION ABOVE THE TOP OF THE PIPE WILL BE REQUIRED ON PIPE UNDER ROADWAY AREAS. THESE ITEMS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR **STORM SEWER, ADS N-12**, OF THE DIAMETER SPECIFIED.

DETENTION POND/RAIN GARDEN

THIS WORK SHALL CONSIST OF ALL MATERIALS REQUIRED TO COMPLETE CONSTRUCTION OF THE BIOINFILTRATION AREA INCLUDING. WORK SHALL CONFORM TO SECTIONS 202, 254, 280, 281 & 1004 OF THE STANDARD SPECIFICATIONS.

TEMPORARY COVER SHALL CONSISTS OF EROSION CONTROL MATERIALS THAT PROVIDE SHORT-TERM PROTECTION OF DISTURBED SOIL AREAS. THEY SHALL BE COMPOSED OF BIODEGRADABLE MATERIALS WITH VARIABLE LONGEVITY.

WORK TO BE PERFORMED DURING THE FIRST YEAR OF THE PLANT ESTABLISHMENT PERIOD SHALL BE DONE BY THE CONTRACTOR AND INCLUDE THE FOLLOWING:

1. WEED CONTROL AND REMOVAL OF INAPPROPRIATE PLANT SPECIES.
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3. REPAIR OF RILLS, GULLIES, AND OTHER DAMAGE CAUSED BY EROSION AND SCOUR.
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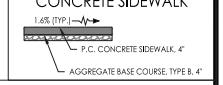
5. REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS.
6. ADDITIONAL PLANTING.
7. ADDITIONAL IRRIGATION, AND
8. MONITORING OF PLANT GROWTH AND ESTABLISHMENT.

NEAR 100% COVERAGE SHOULD BE POSSIBLE AFTER THE SECOND GROWING SEASON.

PLANT BULBS SHALL BE PLANTED AT THE LOCATIONS AS DIRECTED BY THE OWNER.

THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID PER SQUARE FOOT FOR **RAIN GARDEN**.

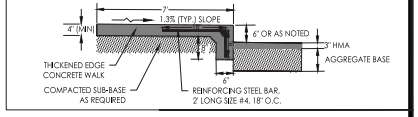
TYPICAL SECTION
CONCRETE SIDEWALK



TYPICAL SECTION HMA PAVEMENT
(FULL DEPTH)

TYPICAL SECTION HMA PAVEMENT

TYPICAL SECTION
THICKENED EDGE SIDEWALK



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600-660 S. Randall Road
Overall Site Plan

CHECKED BY: KCB
DATE: 06/30/14
DRAWN BY: JAB
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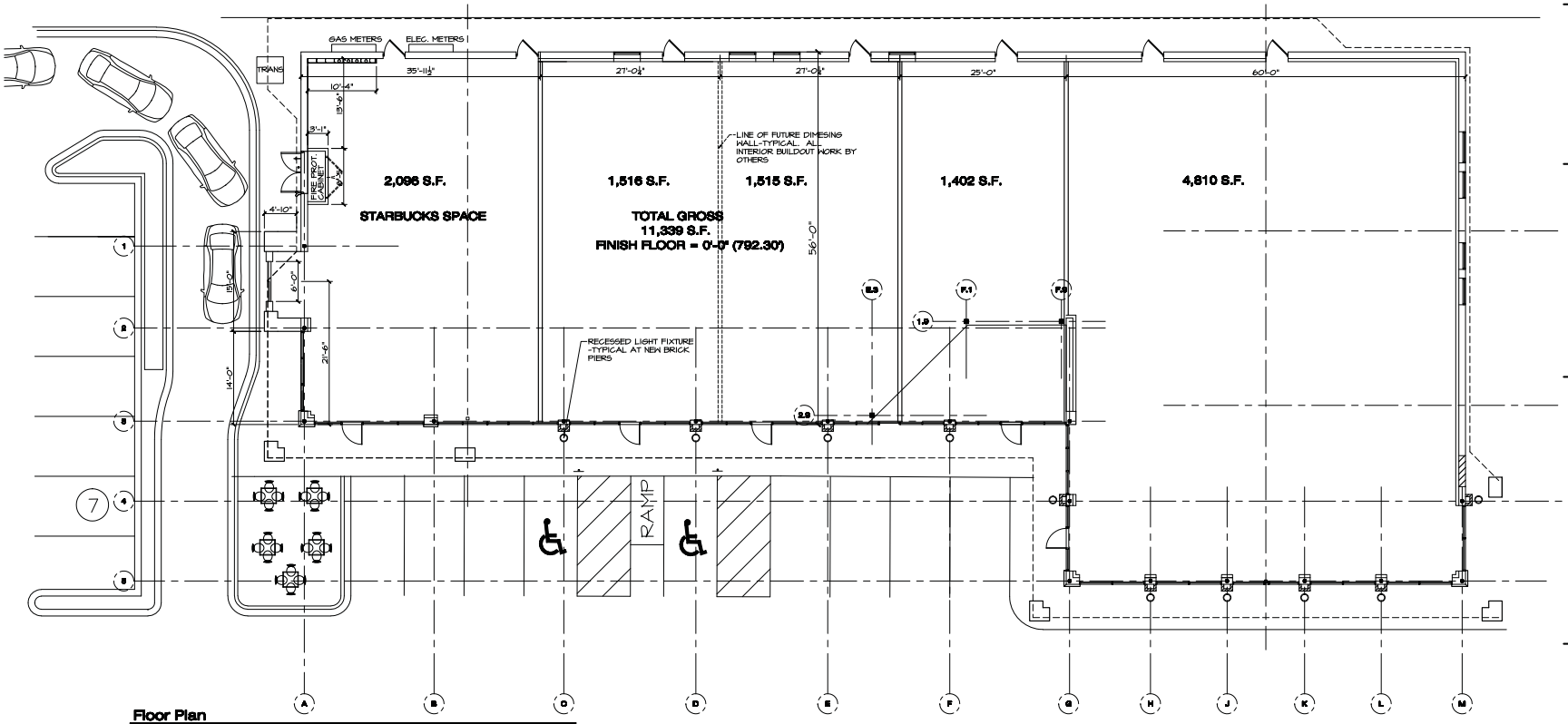
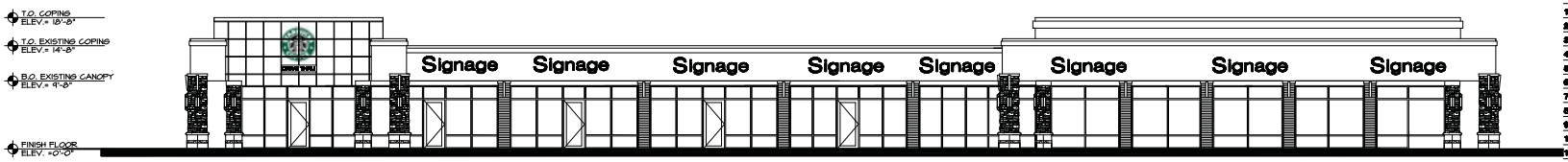
3602_BASE.dwg

Sheet
3 of 5



Floor Plan

1/8" = 1'-0"



Concept Elevation One

1/8" = 1'-0"

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Existing Retail Building Remodeling to Randall Shoppes

600-660 Randall Road
St. Charles, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWING WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF McCLELLAN BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO.	DATE	DESCRIPTION
1)	1-10-14	Building Survey
2)	1-14-14	Draft Survey
3)	1-21-14	Owner Review
4)	2-10-14	City of St. Charles Prelim. Review
5)	2-17-14	Meeting with General Contractor
6)	4-16-14	60% CD Review Check Set
7)	4-29-14	90% CD Review Check Set
8)	5-9-14	Roof Plan RTU Equipment
9)	6-29-14	Issued for Permits
10)	7-21-14	Revision
10)	8-8-14	Revision

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Project No.

1406

Scale

1/8" =1'-0"

Sheet Title

CONCEPT FLOOR PLAN/ELEVATIONS

Ref. North

Sheet No.

A101

PROFESSIONAL DESIGN FIRM REGISTRATION #
184-003342

North West View

First Rockford Group

McClellan Blakemore Architects

Conceptual Rendering

Proposed Starbucks Retail Space

Randall Shoppes - St. Charles, Illinois

date: 9/9/14

1

McClellan Blakemore Architects

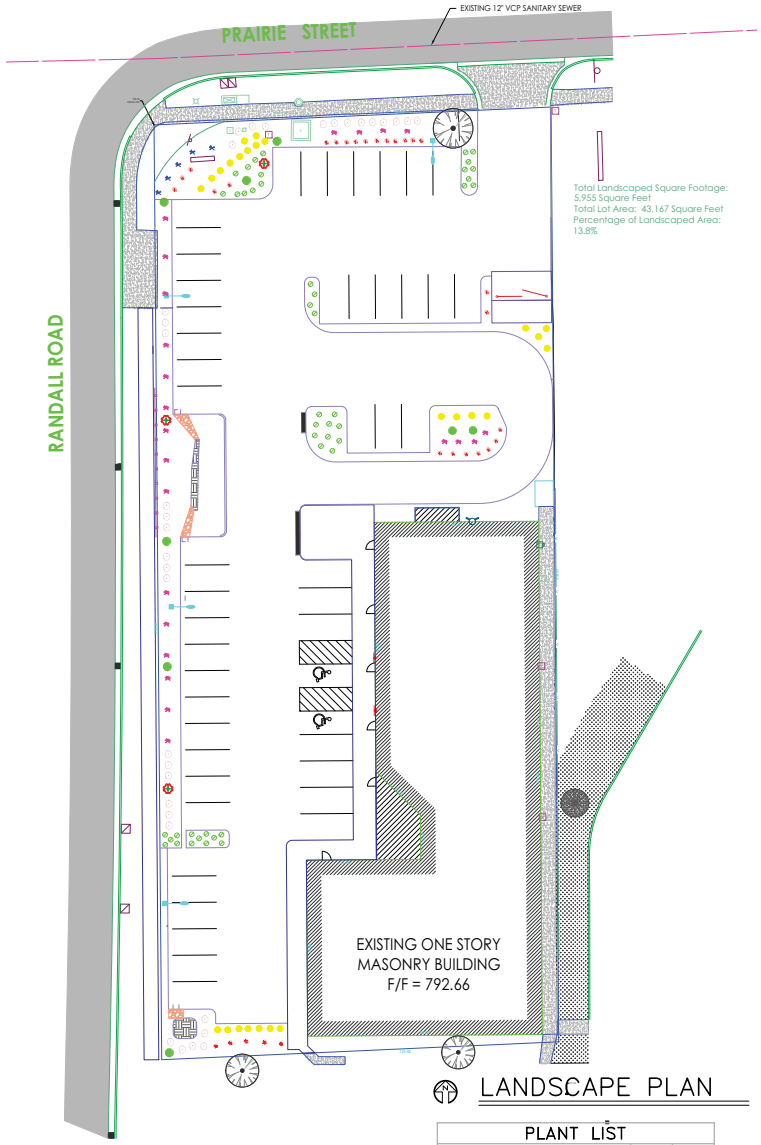
Conceptual Rendering

Proposed Starbucks Retail Space

Randall Shoppes - St. Charles, Illinois

date: 9/9/14

2



LANDSCAPE PLAN

PLANT LIST

KEY	BOTANNICAL NAME / COMMON NAME	QUANTITY	SIZE
	BLACKAHAW VIBURNUM	23	30"
	TINA CRABAPPLE	8	2"
	KARL FOERSTER GRASSES	21	1 GAL.
	CHICAGO FIRE BURNING BUSH	34	30"
	NEARLY WILD ROSES	31	18"
	GOLD MOUND, SPIREA	44	24
	BARBERRY	5	6"
	PYRUS CALLERYANA, AUTUMN BLAZE	3	2"
RAIN GARDENS	YELLOW CONEFLOWER AND BLUE JOINT GRASS		

Sam
Schwartz
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D.P.C.

Starbucks with Drive-Thru Window

Traffic Impact Study
St. Charles, Illinois
November 2014

Ms. Lynn M. Means, P.E., PTOE

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INTRODUCTION

Sam Schwartz Engineering, D.P.C (SSE) was retained by Starbucks Corp. to conduct a traffic impact analysis for the proposed redevelopment of the existing multi-tenant outlot building to the Jewel-Osco grocery store located on the southeast corner of the intersection of Randall Road (Kane County Route 34) and Prairie Street in St. Charles, Illinois. The site location is illustrated on ***Figure 1***.

As proposed, the development includes a 437 square foot expansion to the existing 10,900 square-foot building and the addition of a coffee shop use with drive-thru window, which will occupy 2,015 square-feet of the 11,337 square-foot building. Parking for the proposed development will consist of 50 surface spaces. Access to the site is to be provided via the existing, full access driveway on Prairie Street.

The following report presents and documents SSE's methodology, data collection, analyses, and identifies improvements, as necessary, to mitigate impacts the development's traffic may have on the adjacent roadway network.

N

Not to Scale

Figure 1

Site Location Map

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EXISTING CONDITIONS

SSE conducted field visits to collect relevant information pertaining to existing land uses in the area, the surrounding roadway network, existing traffic volumes, traffic controls, and roadway lane usage at all critical intersections. This section of the report provides a description of these existing characteristics.

Site Location

The site is located at the southeast corner of the intersection of Randall Road and Prairie Street. The site currently contains a 10,900 square-foot building. At the time the data was collected (July 2014), the building contained a 1,200 square-foot comic book store and 9,700 square-feet of vacant space. The site is an outlot building to the Jewel-Osco grocery store to the east.

Existing Street Characteristics

Randall Road is a north/south principal arterial along the western site boundary. At its signalized intersection with Prairie Street, Randall Road provides a left-turn, a through lane and a shared through/right-turn lane in the northbound and southbound directions. This signal is part of a closed loop system along Randall Road. Randall Road is under the jurisdiction of the Kane County Division of Transportation (KDOT) with a posted speed limit of 45 miles per hour (MPH) in the vicinity of the site. It is designated as a Strategic Regional Arterial (SRA). The SRA designation controls roadway access and signal installation so as to facilitate efficient and safe transportation.

Prairie Street is an east/west, three-lane major collector roadway along the northern site boundary. At its signalized intersection with Randall Road, Prairie Street provides a left-turn lane and a shared through/right-turn lane in the eastbound direction and a left-turn, through and right-turn lane in the westbound direction. Prairie Street operates under free-flow condition at its intersections with the site access driveway and the Jewel-Osco/Shopping Center driveway, which operate under STOP sign control. Eastbound left-turns from Prairie Street to the Shopping Center to the north are currently prohibited. Prairie Street is under the jurisdiction of the City of St. Charles with a posted speed limit of 30 MPH.

Existing Traffic Volumes

To gain an understanding of the traffic patterns in the area, manual traffic counts were conducted on a weekday morning (6:00 to 9:00 AM) and weekday evening (4:00 to 6:00 PM) and on a Saturday midday (11:00 AM to 1:00 PM) in July 2014 at the following intersections:

- Randall Road and Prairie Street
- Prairie Street and Site Access
- Prairie Street and Jewel-Osco Driveway

The time periods were chosen to coincide with the typical peak periods of the adjacent roadway network and the proposed development. The results of the traffic counts indicate that the weekday morning peak hour occurs from 8:00 to 9:00 AM, the weekday evening peak hour occurs from 4:30 to 5:30 PM, and the Saturday midday peak hour generally occurs from 11:30 AM to 12:30 PM.

Based on traffic count data retrieved from the Kane County Division of Transportation website, the average daily traffic in the vicinity of the development is 32,500 vehicles (Year 2011) on Randall Road.

The existing peak hour volumes are illustrated on ***Figure 2***. Summaries of the traffic count data are contained in the Appendix of this report.

Pedestrian/Bike Facilities

Sidewalks are provided along both sides of Randall Road and Prairie Street. Crosswalks are maintained along the east, west and south legs of the Randall Road and Prairie Street intersection.

Public Transportation

The proposed site is well served by public transportation. Pace Bus 801 (Elgin-Geneva) operates weekly and Saturday service between Elgin and Geneva, serving the Geneva Metra Station, businesses along Randall Road, and the Elgin Terminal. Bus stops are provided in the site vicinity along Randall Road at the northwest and southeast corner of its intersection with Prairie Street.

Pace Bus Route 801 also provides a connection to Pace Bus Routes 529 and 802, serving Aurora, as well as to the St. Charles-Geneva Call-n-Ride, which provides local service to Geneva and St. Charles.

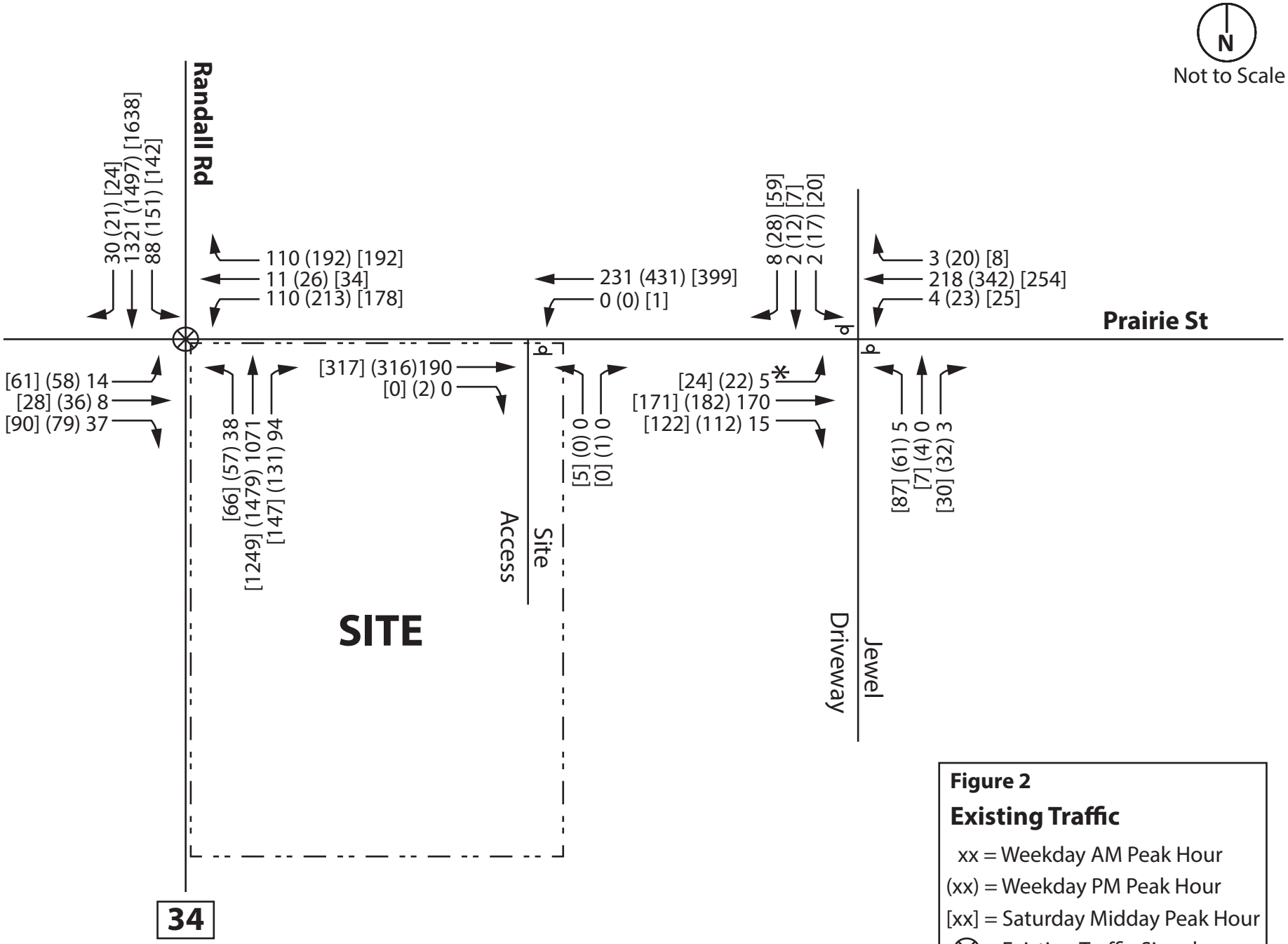

Figure 2

Existing Traffic

xx = Weekday AM Peak Hour
(xx) = Weekday PM Peak Hour
[xx] = Saturday Midday Peak Hour
⊗ = Existing Traffic Signal
= Existing Stop Sign
✱ = Illegal Movement

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Existing Operations

The effectiveness of an intersection's operation is measured in terms of Level of Service ("LOS"), which is assigned a letter from A to F based on the average total delay experienced by each vehicle passing through an intersection. Level of Service A is the highest (best traffic flow and least delay), Level of Service E represents saturated or at-capacity conditions, and Level of Service F is the lowest (oversaturated conditions). The minimum intersection LOS that is generally accepted by industry standards is LOS "D."

An intersection capacity analysis was utilized to analyze the intersections for the weekday peak hours using the methodologies outlined in the *Highway Capacity Manual (HCM)*[1]. The results in ***Table 1*** show that all approaches at the study intersections operate at acceptable levels of services, at LOS "D," or better, with the exception of the Prairie Street westbound approach at its intersection with Randall Road. During the weekday evening and Saturday midday peak hours, this approach operates with capacity constraints at a LOS "E." The existing timings at this intersection were obtained from the Kane County Division of Transportation. The worksheets containing the intersection analyses are provided in the Appendix.

Table 1: Existing Intersection Level-of-Service

Intersection/Peak Hour/Lane	Weekday AM Peak Hour		Weekday PM Peak Hour		Saturday Midday Peak Hour	
	Delay [A]	LOS [B]	Delay	LOS	Delay	LOS
Randall Rd at Prairie St						
Prairie St EB approach	48.7	D	50.8	D	50.7	D
Prairie St WB approach	44.2	D	60.7	E	55.0	E
Randall Rd NB approach	19.5	B	27.2	C	23.5	C
Randall Rd SB approach	21.5	C	24.4	C	29.2	C
Prairie St at Site Access						
Prairie St WB left turns	0.0	A	0.0	A	7.9	B
Site Access NB approach	0.0	A	10.0	B	14.3	A
Prairie St at Jewel-Osco Dwy						
Prairie St WB left-turns	0.2	A	0.7	A	0.9	A
Jewel-Osco NB approach	10.0	A	13.2	B	12.6	B
Shopping Center SB approach	9.9	A	12.5	B	11.0	B

[A] Average control delay in seconds per vehicle.
[B] Level of service.

[1]Highway Capacity Manual, Transportation Research Board, National Research Council, Washington, D.C., 2010.

FUTURE TRAFFIC CHARACTERISTICS

This section of the report presents the traffic characteristics associated with the proposed development and evaluates the impact of future traffic on the area street system. This includes discussions regarding site development plans, site-generated traffic volumes and their distributions on the surrounding roadway network. Site access, site traffic assignment, and future traffic volumes are also discussed.

Traffic Growth

Construction and occupancy of the proposed development is currently expected to occur by the year 2015. In order to account for the general traffic growth associated with new development in the surrounding area until the proposed development is constructed, SSE applied an annual growth rate of two (2) percent to the existing traffic volumes on Randall Road and one (1) percent to the existing traffic volumes on Prairie Street.

Second, any planned or approved specific developments in the area that would generate a significant volume of traffic on study area roadways within the project design horizon were included. As previously indicated, the existing site currently contains 9,700 square-feet of vacant space. It is anticipated that this space will be occupied by a 2,000 square-foot restaurant (assumed to be a sandwich shop that is not open during the weekday morning peak period), 3,850 square-feet of specialty retail space, and 3,850 square feet of general office space. To estimate the volume of traffic to be generated by the occupancy of the existing development, trip generation rates provided in the Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition*[2] were utilized and assigned to the roadway network. The ITE report is a compilation of national traffic data surveys utilized to estimate traffic volumes for various land uses.

It should be noted that not all of the vehicle trips expected to be generated by the occupancy of the vacant space contained within the existing building represent new trips on the study area roadway system. Studies have shown that for retail and restaurant developments, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. Based on data presented in the ITE *Trip Generation Handbook*, the average pass-by trip percentage for retail and restaurant uses is between 26 to 34 percent during the weekday evening and Saturday midday peak hours. However, to provide a conservative analysis, a 20% reduction for pass-by traffic was applied to the retail and restaurant site-generated trips.

In addition, the vehicle trips calculated using these proposed uses represent single-use trips on the study area roadway system. Studies have shown for developments of mixed-use or multi-use sites, it is realistic to assume that there will be some multi-use trips within the site itself, as well as adjacent retail uses. However, in order to provide a conservative (worst-case) analytical framework, an internal trip credit was not applied.

[2] Trip Generation, 9h Edition, Institute of Transportation Engineers (ITE), Washington, D.C., 2012.

The site-generation characteristics of the full occupancy of the existing site are summarized in **Table 2** and are graphically depicted on ***Figure 3***.

Table 2: Existing Site Generated Traffic Volumes

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Midday		
	In	Out	Total	In	Out	Total	In	Out	Total
Existing – 1,200 SF Comic Book Store[1]	0	0	0	2	1	3	1	5	6
Restaurant (Sandwich Shop) (LUC 933) – 2,000 SF	--	--	--	27	25	52	53	56	109
Specialty Retail[2] (LUC 826) – 3,850 SF	2	2	4	14	17	31	10	9	19
General Office – 3,850 SF (LUC 710)[3]	5	1	6	1	5	6	1	0	1
Total Development Trips[4]	7	3	10	44	48	92	65	70	135
Less Pass-By (20%)	*--*	*--*	*--*	*-9*	*-9*	*-18*	*-13*	*-13*	*-26*
Total New Trips[5]	**7**	**3**	**10**	**35**	**39**	**74**	**52**	**57**	**109**

[1] From July 2014 intersection turning movement counts.
[2] ITE LUC 826 (Specialty Retail Center) data not available for weekday AM peak hour adjacent street and Saturday midday peak hour. Volumes were estimated by utilizing the average rates for a related use: ITE LUC 820 (Shopping Center).
[3] Average rates used, in accordance with ITE Trip Generation Handbook, due to small building size.
[4] Existing site use plus full occupancy of vacant space.
[5] Total development site trips minus pass-by site trips and existing trips.

Planned Roadway Improvements

The *Kane County 2040 Transportation* Plan has identified the widening of Randall Road from Oak Street in St. Charles to Main Street in Batavia from a four-lane cross section (two through lanes in each direction) to six-lanes (three through lanes in each direction). This improvement will provide traffic flow benefits to Randall Road, as well as intersecting roadways, such as Prairie Street. However, this project is not included in current *Transportation Improvement Program (2014-2018).* Thus, there is no construction completion date scheduled or funding for this project. Accordingly, no adjustments to the future traffic-volume networks were required to account for the planned roadway improvements along Randall Road.

2015 No-Build (Non-Site) Conditions

The 2015 No-Build peak hour traffic volumes were accordingly developed by applying a one to two percent annual growth rate to the existing traffic (Figure 2) and adding the traffic associated with the full occupancy of the existing site (Figure 3). The 2015 No-Build traffic-flow networks are graphically depicted on ***Figure 4***.

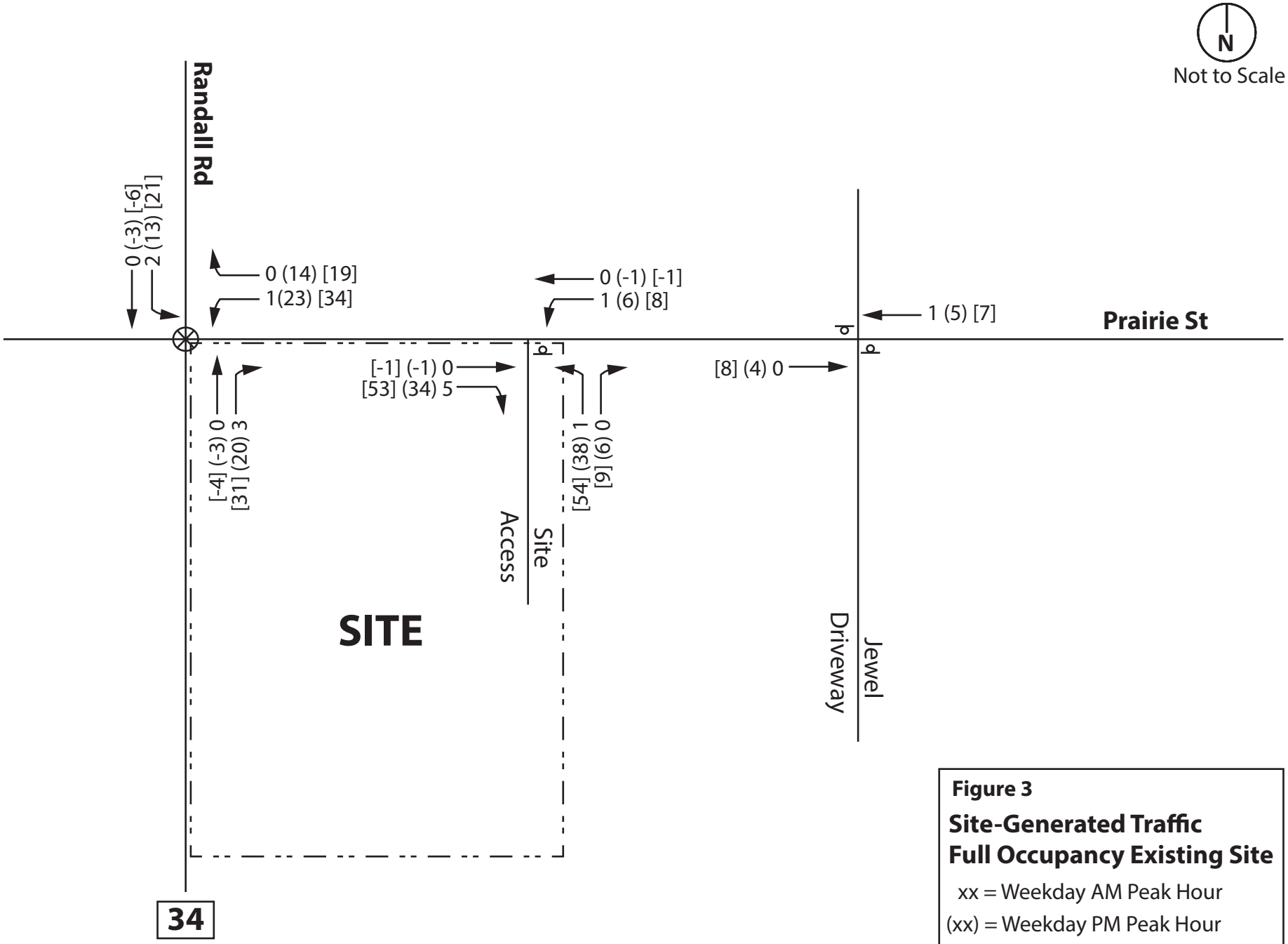

Figure 3

Site-Generated Traffic
Full Occupancy Existing Site

xx = Weekday AM Peak Hour
(xx) = Weekday PM Peak Hour
[xx] = Saturday Midday Peak Hour
⊗ = Existing Traffic Signal
= Existing Stop Sign

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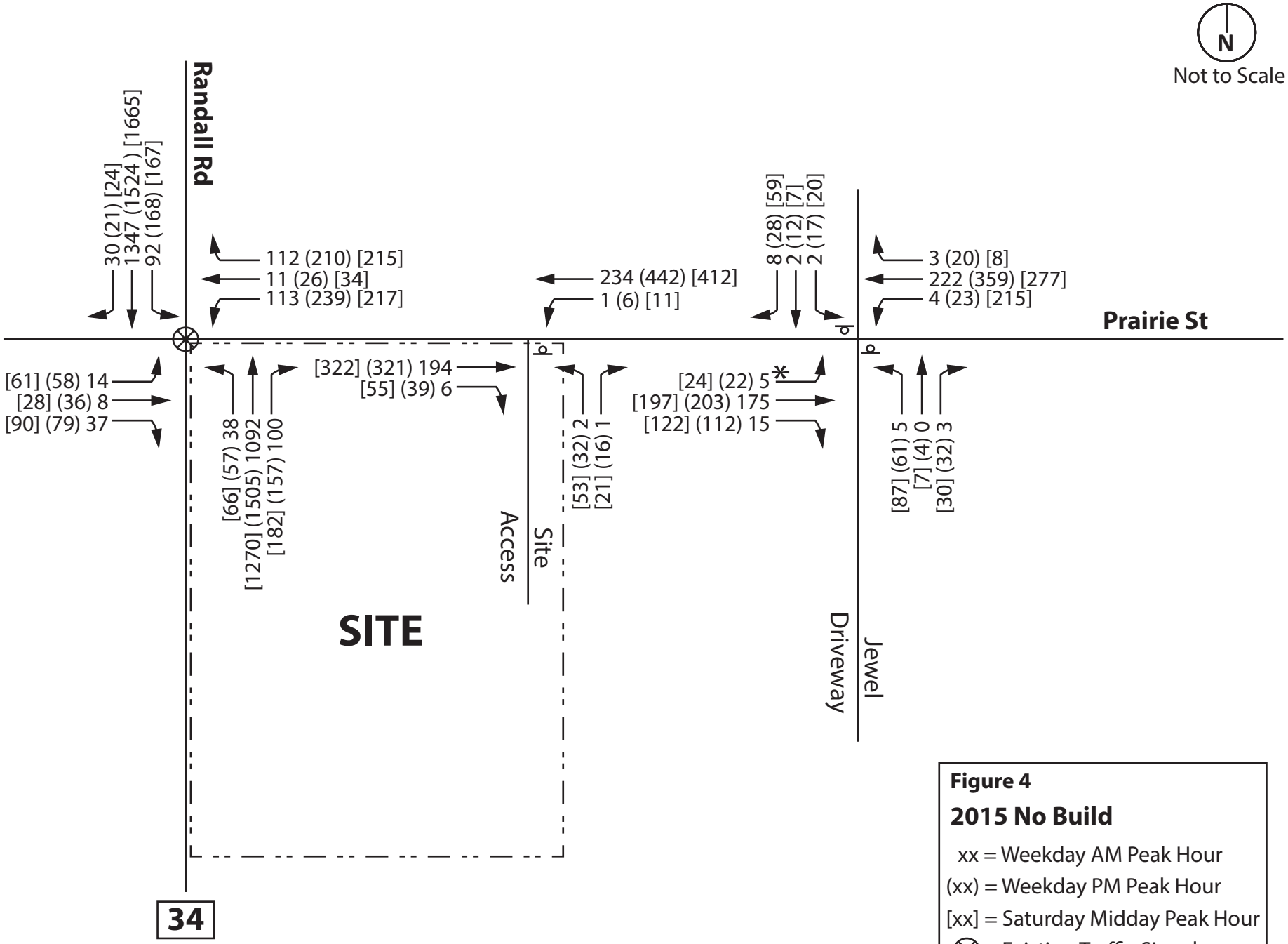

Figure 4

2015 No Build

xx = Weekday AM Peak Hour
(xx) = Weekday PM Peak Hour
[xx] = Saturday Midday Peak Hour
⊗ = Existing Traffic Signal
= Existing Stop Sign
* = Illegal Movement

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Development Plans

As proposed, the development consists of constructing a 437 square foot expansion to the existing building and the addition of a coffee shop use with drive-thru window, which will occupy 2,015 square-feet of the 11,337 square-foot building. Parking for the proposed development will consist of 50 surface spaces. Access to the site is to be provided via the existing, full access driveway on Prairie Street.

Trip Generation

The estimates of traffic to be generated by the site are based upon the proposed land use type and size. The ITE *Trip Generation* manual was used to estimate the volume of traffic generated by the proposed 2,015 square-foot coffee shop with drive-thru development during the weekday morning, weekday evening, and the Saturday midday peak hours. It should be noted, 1,578 square-feet (2,015 square feet less than the 437 square-foot addition) of the proposed coffee shop is currently assumed as retail/office space under the 2015 No-Build scenario (assuming full occupancy of the existing shopping center); however, no discount for this space was assumed in the analyses to provide a conservative (worse case) analysis scenario.

Again, it should be noted that not all of the vehicle trips expected to be generated by the proposed project represent new trips on the study area roadway system. Studies have shown that for coffee shop developments, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. Based on data presented in the ITE *Trip Generation Handbook*, the average pass-by trip percentage for coffee shop uses is between 83 to 89 percent. However, to provide a conservative analysis, a 20% reduction for pass-by traffic was applied to the site-generated trips. And, again, in order to provide a conservative (worst-case) analytical framework, an internal trip credit was not applied. The methodology for pass-by/internal trip reductions is consistent with state guidelines for the preparation of traffic impact studies on SRA routes.

The total trips to be generated for the proposed land uses are detailed in ***Table 3.*** All trip generation calculations are contained in the Appendix.

Accordingly, the proposed coffee shop with drive-thru development is expected to generate 163 new vehicle trips (84 entering, 79 exiting) during the weekday morning peak hour, 68 new vehicle trips (34 entering, 34 exiting) during the weekday evening peak hour, and 136 new vehicle trips (68 entering, 68 exiting) during the Saturday midday peak hour. It should be noted that the volume of pass-by traffic does not reduce the total traffic generated by the development and the total trips generated will be still realized as turning movements at the site driveways.

Table 3: Site-Generated Traffic Volumes

Land Use / Size	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Midday		
	In	Out	Total	In	Out	Total	In	Out	Total
Existing Site (Including Occupancy of Vacant Space) Trips [1]	7	3	10	44	48	92	65	70	135
Proposed Coffee Shop w/ Drive-Thru (LUC 937) – 2,015 SF[2]	104	99	203	43	43	86	85	85	170
Less Pass-By (20%)	*-20*	*-20*	*-40*	*-9*	*-9*	*-18*	*-17*	*-17*	*-34*
Total New Trips [3]	**84**	**79**	**163**	**34**	**34**	**68**	**68**	**68**	**136**
Total Development Trips [4]	111	102	213	87	91	178	150	155	305

[1] From Table 2.
[2] 1,578 SF (2,015 SF less the 437 SF addition to the existing building) of this space is currently assumed as retail/office space under the No-Build Scenario, which assumes full occupancy of the vacant space contained within the existing shopping center; however no discount for the trip generation of this space was taken to provide a conservative analysis scenario.
[3] Proposed development site trips minus pass-by site trips.
[4] Existing site (including occupancy of vacant existing space) plus proposed coffee shop with drive-thru use.

Directional Distribution

The anticipated directional distribution of site traffic is dependent upon various factors; including the proposed land use and development layout, the adjacent roadway network, access locations, population, competing opportunities, and levels of congestion. The anticipated directional distribution of the expected *new* generated site traffic is shown in ***Table 4*** and on ***Figure 5***. The distribution of *pass-by* traffic will follow the directional distribution of adjacent street traffic during each specific peak hour.

Table 5: Directional Distribution

To/From the…	Percentage
North on Randall Road	30%
South on Randall Road	55%
East on Prairie Street	15%
Total	**100%**

Site Traffic Assignment

The site-generated traffic volumes were assigned to the external roadway system and proposed site access system based on the directional distribution as identified above. ***Figure 6*** illustrates the site traffic assignment to and from the proposed development upon completion of the project.

Traffic Growth and Total Traffic Assignment

The total traffic assignment represents the overall projected traffic volumes upon full construction of the project and was determined by combining the site-generated volumes (Figure 6) plus the 2015 No-Build traffic volumes (Figure 4). The 2015 total traffic volumes are shown on ***Figure 7***.

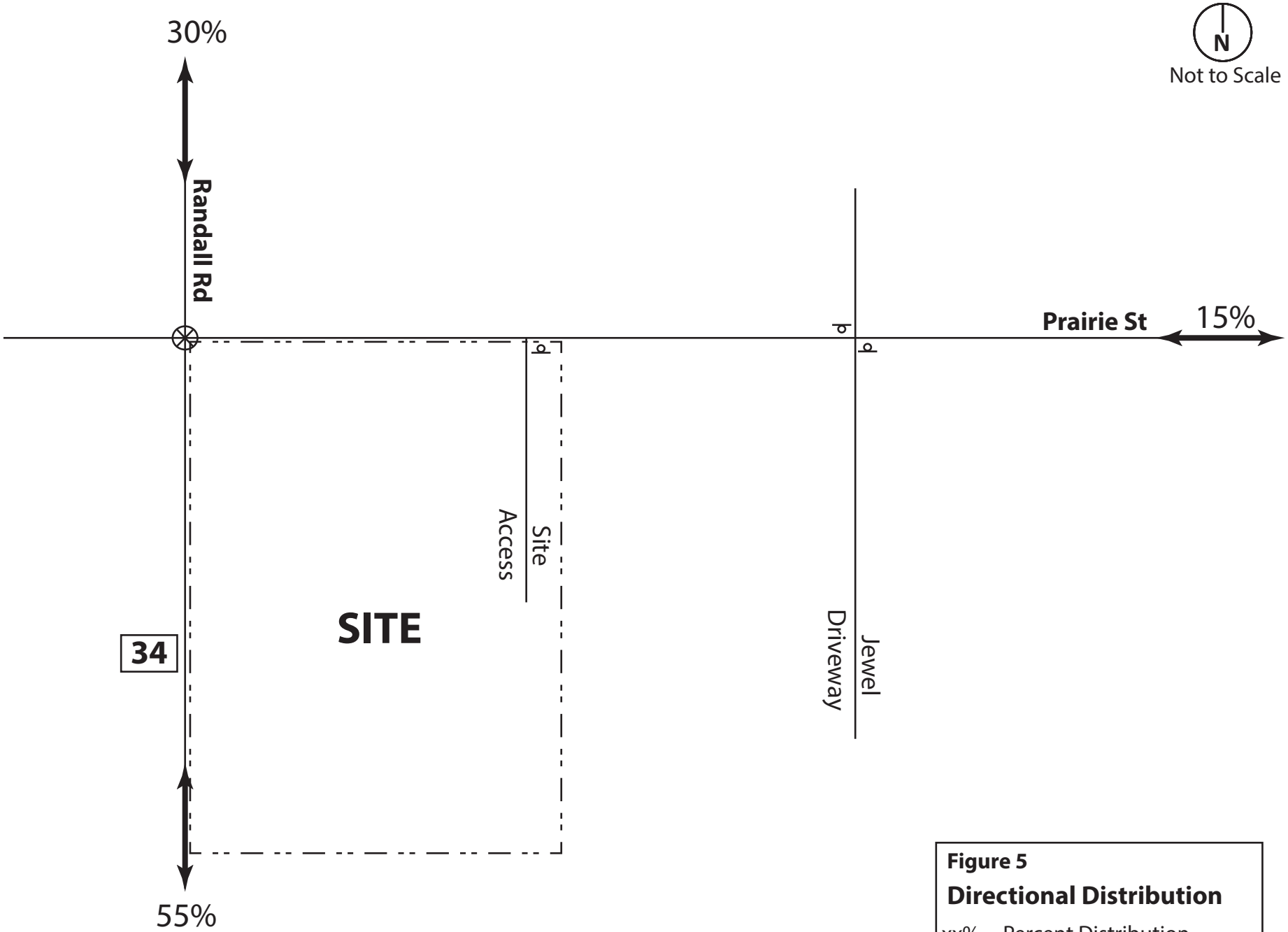

Figure 5

Directional Distribution

xx% = Percent Distribution
New Site Traffic

⊗ = Existing Traffic Signal

= Existing Stop Sign

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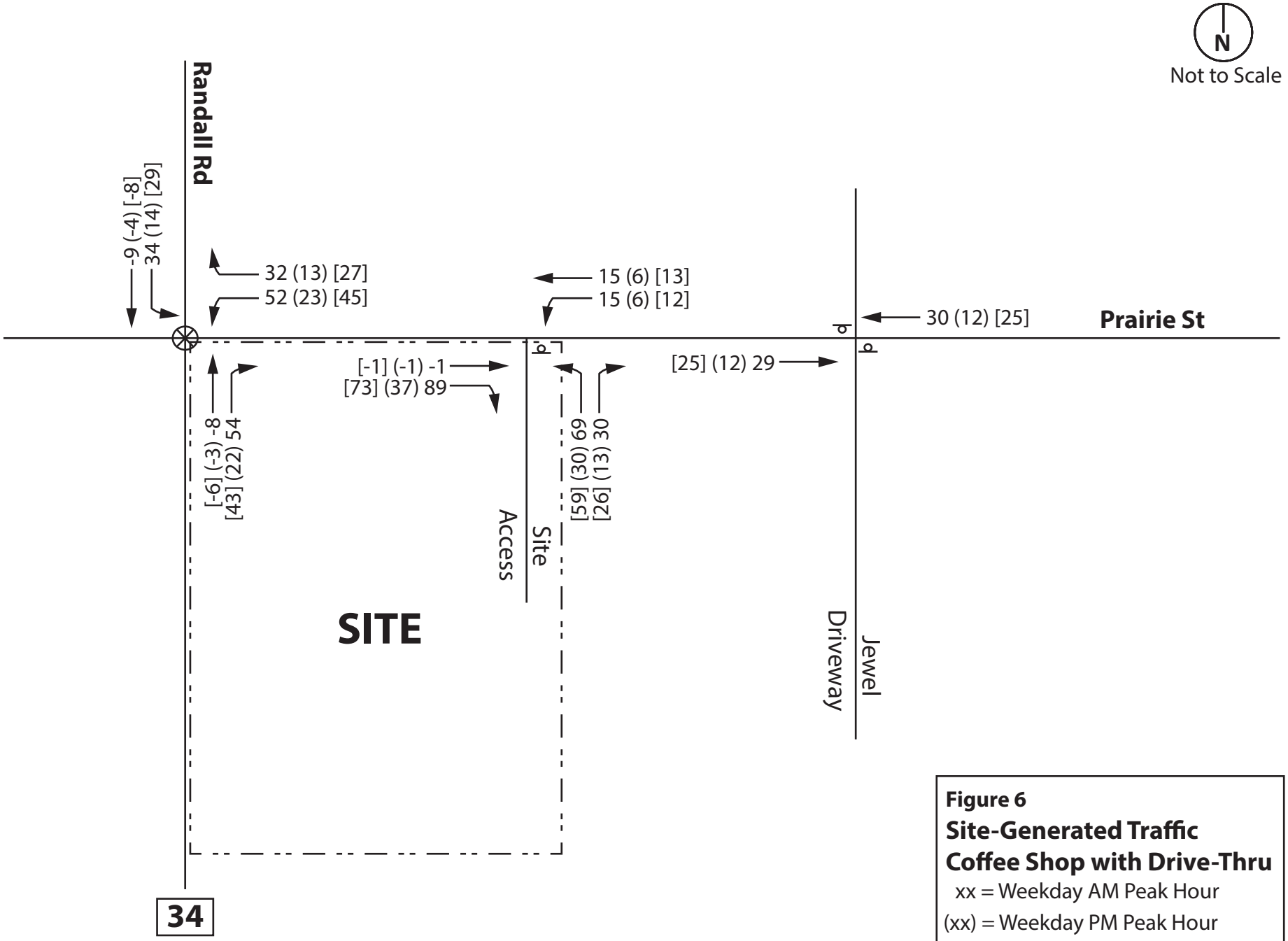

Figure 6
Site-Generated Traffic
Coffee Shop with Drive-Thru

xx = Weekday AM Peak Hour
(xx) = Weekday PM Peak Hour
[xx] = Saturday Midday Peak Hour
⊗ = Existing Traffic Signal
= Existing Stop Sign

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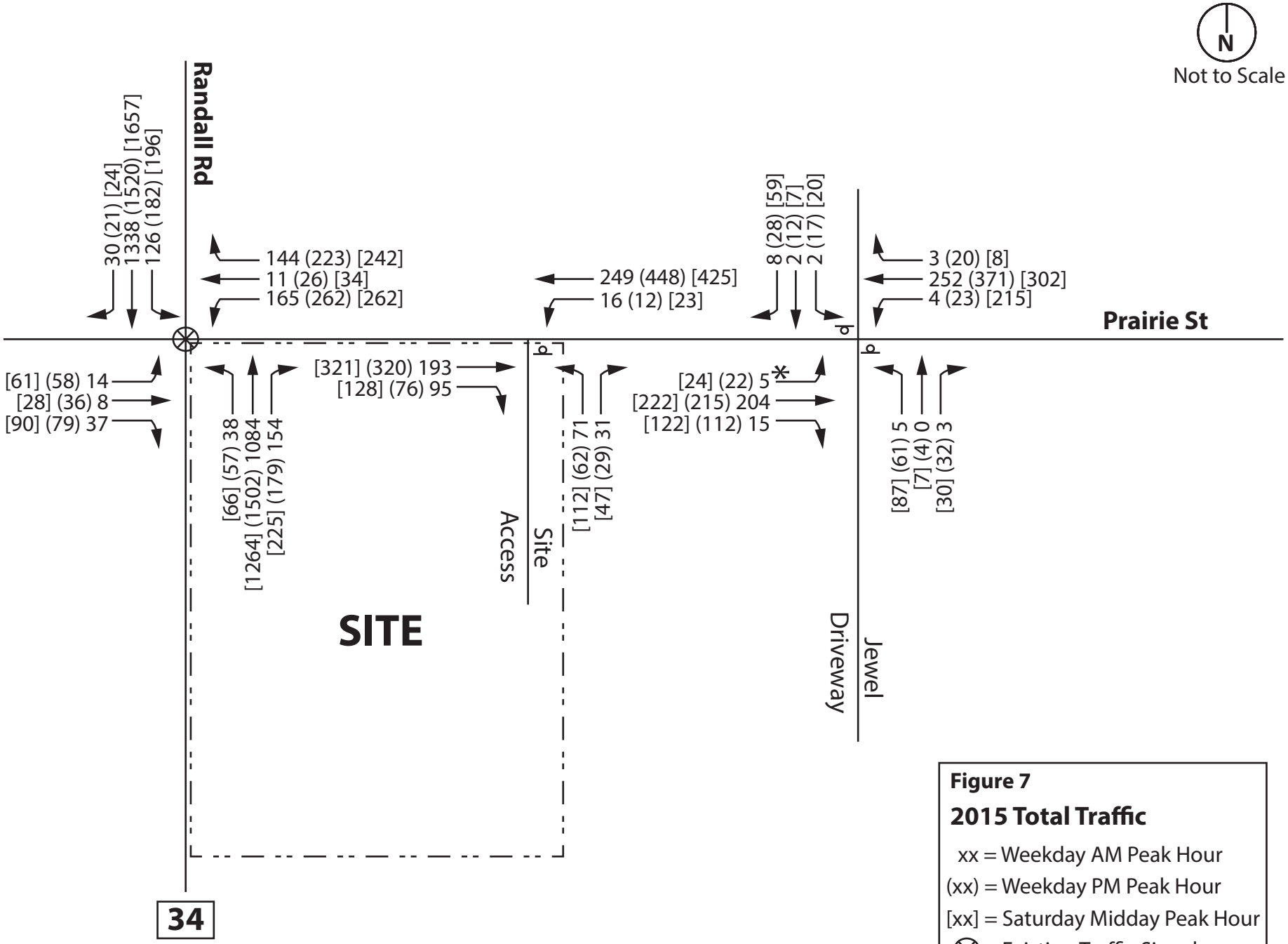

Figure 7

2015 Total Traffic

xx = Weekday AM Peak Hour
(xx) = Weekday PM Peak Hour
[xx] = Saturday Midday Peak Hour
⊗ = Existing Traffic Signal
= Existing Stop Sign
✱ = Illegal Movement

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ANALYSIS

Analyses were conducted to determine whether the adjacent roadway network would be able to accommodate the needs of the proposed development. The analyses conducted include capacity analyses for future traffic conditions at the study intersections and a review of the available internal stacking on-site for the proposed coffee shop with a drive-thru.

Capacity Analysis

Capacity analyses were conducted for assessing future traffic conditions using the methodologies outlined in the *Highway Capacity Manual.* Summaries of the capacity analysis results indicating the LOS for all study intersections under future conditions are presented in ***Table 6*** and are discussed below. All output worksheets used for these analyses are contained in the Appendix. The analyses for the signalized intersection of Randall Road and Prairie Street were accomplished using the existing cycle lengths for the respective peak hours.

Table 6: Future Intersection Level-of-Service

Intersection/ Peak Hour/Lane	2015 No-Build						2015 Total Traffic					
	Weekday AM Peak Hour		Weekday PM Peak Hour		SAT Midday Peak Hour		Weekday AM Peak Hour		Weekday PM Peak Hour		SAT Midday Peak Hour	
	Delay [A]	LOS [B]	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Randall Rd at Prairie St												
Prairie St EB approach	48.6	D	49.6	D	49.3	D	49.2	D	49.8	D	48.7	D
Prairie St WB approach	42.3	D	65.1	E	60.4	E	44.5	D	75.0	E	73.6	E
Randall Rd NB approach	19.2	B	29.2	C	25.7	C	20.8	C	34.3	C	30.8	C
Randall Rd SB approach	21.1	C	26.8	C	31.5	C	21.7	C	29.2	C	36.0	D
Prairie St at Site Access												
Prairie St WB left turns	7.6	A	8.1	A	8.1	A	7.9	A	8.2	A	8.3	A
Site Access NB approach	10.3	B	13.4	B	13.7	B	12.2	B	15.1	C	17.6	C
Prairie St at Jewel-Osco												
Prairie St WB left-turns	0.2	A	0.7	A	4.7	A	0.2	A	0.7	A	4.7	A
Jewel-Osco NB approach	10.0	A	13.5	B	22.3	C	10.2	B	13.7	C	23.5	C
Shopping SB approach	9.9	A	12.8	B	13.4	B	10.1	B	13.0	B	13.8	B

[A] Average control delay in seconds per vehicle.
[B] Level of service.

Comparison of existing and future conditions capacity analyses at the intersection of Randall Road and Prairie Street, show the overall intersection and approaches will continue to operate at acceptable LOS (at LOS "D," or better), again, with the exception of the Prairie Street westbound approach, which will continue to operate at LOS "E," in the future. Based on field observations and the queue analysis contained herein, average westbound vehicle queues on Prairie Street are expected to extend beyond the site driveway under both existing and future conditions during the weekday PM and Saturday midday peak hour. Field observations and a review of a traffic simulation of the projected traffic on Prairie Street during the peak hours using SIMTraffic software revealed that these queues dissipated between cycles, permitting acceptable gaps for vehicles to enter and egress the site.

However, the future analyses assumed that during the peak hours, approximately 20 percent of vehicles destined to the north and south on Randall Road (left-turn exiting maneuvers from the site) would turn right out of the site driveway and seek a means to access Randall Road via the Shopping

Center to the north or turnaround via one of the Jewel-Osco driveways or roadways to the east of the site. To provide a conservative analysis (worse case) scenario, it was assumed that 100 percent of these vehicles would turnaround east of the site and then proceed back through the Randall Road and Prairie Street intersection.

As previously noted, with widening of Randall Road to six lanes, considerable improvements to Prairie Street operations would be anticipated. This is a result of traffic on Randall Road able to be accommodated in less time; thus, permitting additional time to be allocated to the minor roadways, such as Prairie Street. This will minimize vehicle queuing on Prairie Street, which will also provide for additional gaps in the Prairie Street traffic stream that will permit vehicles to safely exit the proposed site driveway.

Internal Stacking

A drive-up stacking analysis was conducted to analyze whether the proposed storage space is adequate enough to accommodate the drive-thru vehicles in the coffee shop.

Based on the preliminary site plan, the on-site vehicle storage space of the proposed coffee shop drive-thru window is 8 vehicles, without disrupting site access or on-site circulation. The proposed drive-thru stacking should be more than adequate based upon recent surveys of three other Starbucks sites with drive-thru operations.

These were high volume stores with similar or greater daily traffic counts, as indicated below; as previously noted, the AADT on Randall Road in the site vicinity is 32,500.

	Daily Traffic Volume
• Roosevelt Road, Villa Park	41,700
• Randall Road, South Elgin	32,400
• Rand Road, Lake Zurich	41,200

The surveys were conducted from 6:30 AM to 9:30 AM which represents the peak period for the Starbucks stores. A summary of the maximum stacking for each 15 minute period for the three sites is indicated in **Table 7**. As shown, the maximum stacking never exceeded 8 vehicles during the critical weekday am peak period.

Table 7: Starbucks Drive-Thru Stacking Analysis

Time	South Elgin, Lake Zurich and Villa Park (Max Stacking)
6:30 AM	3
6:45	6
7:00	7
7:15	6
7:30	7
7:45	8
8:00	8
8:15	5
8:30	8
8:45	5
9:00	6
9:15	6

CONCLUSION

A traffic impact analysis was conducted for the proposed development in St. Charles, Illinois. Based on the conducted analyses, the following conclusions were developed:

- The proposed coffee shop with drive-thru development is expected to generate approximately 163 new bi-directional AM peak hour trips, 68 new bi-directional PM peak hour trips, and 136 new bi-directional trips during the Saturday midday peak hour.

- Analyses have been conducted for all study intersections to determine the impact from the proposed development. Peak-hour volume increases on study-area roadways as a result of the development will have minimal impact on intersection operations within the study area.

- With the planned widening of Randall Road from four lanes (two through lanes in each direction) to six lanes (three through lanes in each direction), considerable improvements to traffic flow on Randall Road and its intersections, such as Prairie Street, would be anticipated. However, there is currently no construction completion date scheduled or funding for this project and, therefore, was not included in the future conditions analyses.

- The on-site vehicle storage capacity of the proposed coffee shop drive-through window is eight vehicles, which is adequate to accommodate the anticipated vehicle queues for the drive-through window.

- A DO NOT ENTER- sign should be posted at the Drive-Thru Exit to deter opposing vehicles from entering the one-way drive-thru system.

APPENDICES

Trip Generation Calculations
Level of Service (LOS) Summary
Intersection Capacity Analysis
Drive-Thru Queuing
Traffic Counts

Trip Generation Calculations

General Office Building		AM Peak Hour	PM Peak Hour	Gen. Sat.
LUC:710	**Avg. Rate**	**1.56**	**1.49**	**0.43**
1000 Sq. Ft gross floor area				
3.85				
	Trips By Rate:	6	6	2
Directional Split	**Enter**	**88%**	**17%**	**54%**
	Exit	**12%**	**83%**	**46%**
	Expected Trips	**AM Adj.Str.Tr**	**PM Adj.Str.Tr**	**Gen. Sat.**
	Total	6	6	1
	Enter	5	1	1
	Exit	1	5	0

Fast-Food Rest.w/out Drive-Thru Window		PM Adj.Str.Tr	Gen. Sat.
LUC:933	**Avg. Rate**	**26.15**	**54.55**
	Equation	**Not Given**	**Not Given**
1000 Sq. Ft gross floor area		#of studies:4	#of studies:1
2		R^2=?,std=10.51	
	Trips By Rate:	52	109
Directional Split	**Enter**	**51%**	**49%**
	Exit	**49%**	**51%**
	Expected Trips	**PM Adj.Str.Tr**	**Gen. Sat.**
	Total	52	109
	Enter	27	53
	Exit	25	56

Specialty Retail		AM Adj.Str.Tr	PM Adj.Str.Tr	Gen. Sat.
LUC:826	**Avg. Rate**	**0.96**	**2.76**	**4.82**
	Equation		**T=2.40(X)+21.48**	
1000 Sq. Ft gross leasable area				
3.85				
	Trips By Rate:	4	11	19
	Trips By Eqn:		31	
Directional Split	**Enter**	**62%**	**44%**	**52%**
	Exit	**38%**	**56%**	**48%**
	Expected Trips	**AM Adj.Str.Tr**	**PM Adj.Str.Tr**	**Gen. Sat.**
	Total	4	31	19
	Enter	2	14	10
	Exit	2	17	9

Coffee/Donut Shop with drive-thru		AM Adj.Str.Tr	PM Adj.Str.Tr	Gen. Sat.
LUC:937	**Avg. Rate**	**100.58**	**42.8**	**84.52**
	Equation	**Not Given**	**Not Given**	**LnT=0.64lnX+4.68**
1000 Sq. Ft gross floor area		#of studies:43	#of studies:24	#of studies:9
2.015		R^2=?,std=49.38	R^2=?,std=18.06	R^2=0.59,std=33.38
	Trips By Rate:	203	86	170
	Trips By Eqn:			169
	Expected Trips	203	86	169
Directional Split	**Enter**	**51%**	**50%**	**50%**
	Exit	**49%**	**50%**	**50%**
	Enter	104	43	85
	Exit	99	43	85
		40.6	17.2	34

Level of Service (LOS) Summary

SIGNALIZED INTERSECTIONS

The capacity analyses are summarized into levels of service (LOS) ranging from A (the best) to F (the worst). Immediately following is a more thorough description of each level of service.

- LOS A represents free flow. The general level of comfort and convenience provided to the motorists is excellent. Control delay per vehicle is less than or equal to 10.0 seconds.

- LOS B is in the range of stable flow. The level of comfort and convenience provided is somewhat less than that of LOS A because the presence of others in the traffic stream begins to affect individual behavior. Control delay per vehicle 10.1 to 20.0 seconds.

- LOS C is in the range of stable flow but marks the beginning of significant interference to an individual's movement caused by others in the traffic stream. The general level of comfort and convenience declines noticeably at this level. Control delay per vehicle 20.1 – 35.0 seconds.

- LOS D represents high density, but stable, flow. The driver experiences a generally poor level of comfort and convenience. Control delay per vehicle 35.1 – 55.0 seconds.

- LOS E represents operating conditions at or near the capacity level. Operations at this level are usually unstable and driver comfort and convenience levels are extremely poor. Control delay per vehicle 55.1 – 80.0 seconds.

- LOS F represents forced or breakdown flow. It is the point at which arrival flow exceeds discharge flow thereby causing a queue to form. Operations within the queue are characterized by stop-and-go conditions. Control delay per vehicle is greater than to 80.0 seconds.

UNSIGNALIZED INTERSECTIONS

The capacity analyses are summarized into levels of service (LOS) ranging from A (the best) to F (the worst). Immediately following is a more thorough description of each level of service.

- LOS A represents free flow. The general level of comfort and convenience provided to the motorists is excellent. Delay per vehicle is less than or equal to 10.0 seconds.

- LOS B is in the range of stable flow. The level of comfort and convenience provided is somewhat less than that of LOS A because the presence of others in the traffic stream begins to affect individual behavior. Delay per vehicle 10.1 to 15.0 seconds.

- LOS C is in the range of stable flow but marks the beginning of significant interference to an individual's movement caused by others in the traffic stream. The general level of comfort and convenience declines noticeably at this level. Delay per vehicle 15.1 - 25.0 seconds.

- LOS D represents high density, but stable, flow. The driver experiences a generally poor level of comfort and convenience. Delay per vehicle 25.1 - 35.0 seconds.

- LOS E represents operating conditions at or near the capacity level. Operations at this level are usually unstable and driver comfort and convenience levels are extremely poor. Delay per vehicle 35.1 - 50.0 seconds.

- LOS F represents forced or breakdown flow. It is the point at which arrival flow exceeds discharge flow thereby causing a queue to form. Operations within the queue are characterized by stop-and-go conditions. Delay per vehicle is greater than or equal to 50.1 seconds.

Intersection Capacity Analysis

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	8	37	110	11	110	38	1071	94	88	1321	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	185.4	190.0	188.1	174.3	186.3	190.0	183.0	190.0	188.1	181.1	190.0
Adj Flow Rate, veh/h	16	9	44	129	13	129	45	1260	111	104	1554	35
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	0	0	0	1	9	2	0	4	4	1	5	5
Cap, veh/h	250	32	156	315	294	267	232	1918	169	293	2079	47
Arrive On Green	0.02	0.12	0.12	0.08	0.17	0.17	0.05	0.59	0.59	0.06	0.60	0.60
Sat Flow, veh/h	1810	275	1342	1792	1743	1583	1810	3234	284	1792	3441	77
Grp Volume(v), veh/h	16	0	53	129	13	129	45	676	695	104	776	813
Grp Sat Flow(s),veh/h/ln	1810	0	1617	1792	1743	1583	1810	1738	1780	1792	1721	1798
Q Serve(g_s), s	0.9	0.0	3.6	7.4	0.8	8.9	1.1	31.2	31.4	2.6	39.2	39.4
Cycle Q Clear(g_c), s	0.9	0.0	3.6	7.4	0.8	8.9	1.1	31.2	31.4	2.6	39.2	39.4
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.16	1.00		0.04
Lane Grp Cap(c), veh/h	250	0	188	315	294	267	232	1031	1055	293	1040	1086
V/C Ratio(X)	0.06	0.00	0.28	0.41	0.04	0.48	0.19	0.66	0.66	0.36	0.75	0.75
Avail Cap(c_a), veh/h	357	0	396	325	427	387	300	1031	1055	341	1040	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	0.0	48.7	40.7	41.9	45.3	15.1	16.3	16.4	13.4	17.2	17.2
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.6	0.1	1.9	0.3	3.3	3.2	0.5	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.7	3.7	0.4	4.0	0.6	15.8	16.2	1.3	19.9	20.9
LnGrp Delay(d),s/veh	45.0	0.0	49.9	41.4	42.0	47.2	15.4	19.6	19.6	14.0	22.1	22.0
LnGrp LOS	D		D	D	D	D	B	B	B	B	C	C
Approach Vol, veh/h		69			271			1416			1693	
Approach Delay, s/veh		48.7			44.2			19.5			21.5	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	97.4	12.3	20.5	8.4	98.8	5.9	26.9
Change Period (Y+Rc), s	3.0	6.5	3.0	6.5	3.0	6.5	3.0	6.5
Max Green Setting (Gmax), s	10.0	71.5	10.0	29.5	10.0	71.5	10.0	29.5
Max Q Clear Time (g_c+I1), s	4.6	33.4	9.4	5.6	3.1	41.4	2.9	10.9
Green Ext Time (p_c), s	0.1	37.9	0.0	1.1	0.0	30.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	170	15	4	218	3	5	0	3	2	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	179	16	4	229	3	5	0	3	2	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	233			195			445	438	187	438	443	229
vC1, stage 1 conf vol							197	197		238	238	
vC2, stage 2 conf vol							247	241		201	205	
vCu, unblocked vol	233			188			439	433	180	433	438	229
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	100	100	99
cM capacity (veh/h)	1347			1391			670	635	863	681	634	815

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	200	234	3	5	3	13
Volume Left	5	4	0	5	0	2
Volume Right	16	0	3	0	3	8
cSH	1347	1391	1700	670	863	754
Volume to Capacity	0.00	0.00	0.00	0.01	0.00	0.02
Queue Length 95th (ft)	0	0	0	1	0	1
Control Delay (s)	0.2	0.2	0.0	10.4	9.2	9.9
Lane LOS	A	A		B	A	A
Approach Delay (s)	0.2	0.2		10.0		9.9
Approach LOS				A		A

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	26.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	190	0	0	231	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	204	0	0	248	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.99		0.99	0.99
vC, conflicting volume			204		453	204
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			186		438	186
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1381		572	849

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	204	0	248	0
Volume Left	0	0	0	0
Volume Right	0	0	0	0
cSH	1700	1700	1700	1700
Volume to Capacity	0.12	0.00	0.15	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0
Lane LOS				A
Approach Delay (s)	0.0	0.0		0.0
Approach LOS				A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	15.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	36	79	213	26	192	57	1479	131	151	1497	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	190.0	190.0	190.0	190.0	188.1	190.0	186.3	190.0	190.0	186.3	190.0
Adj Flow Rate, veh/h	62	38	84	227	28	204	61	1573	139	161	1593	22
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	1	0	2	2	0	2	2
Cap, veh/h	293	65	144	277	294	247	232	1921	168	218	2110	29
Arrive On Green	0.05	0.12	0.12	0.08	0.15	0.15	0.05	0.58	0.58	0.06	0.59	0.59
Sat Flow, veh/h	1810	528	1166	1810	1900	1599	1810	3293	289	1810	3575	49
Grp Volume(v), veh/h	62	0	122	227	28	204	61	839	873	161	788	827
Grp Sat Flow(s),veh/h/ln	1810	0	1694	1810	1900	1599	1810	1770	1812	1810	1770	1855
Q Serve(g_s), s	3.6	0.0	8.3	10.0	1.5	15.2	1.6	46.1	47.5	4.3	40.3	40.4
Cycle Q Clear(g_c), s	3.6	0.0	8.3	10.0	1.5	15.2	1.6	46.1	47.5	4.3	40.3	40.4
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.16	1.00		0.03
Lane Grp Cap(c), veh/h	293	0	209	277	294	247	232	1032	1057	218	1045	1095
V/C Ratio(X)	0.21	0.00	0.58	0.82	0.10	0.83	0.26	0.81	0.83	0.74	0.75	0.76
Avail Cap(c_a), veh/h	350	0	408	277	457	385	289	1032	1057	263	1045	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	0.0	50.8	45.9	44.5	50.2	16.4	20.2	20.5	25.3	18.5	18.6
Incr Delay (d2), s/veh	0.3	0.0	3.7	16.8	0.2	10.6	0.4	7.0	7.4	7.6	5.1	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	4.1	4.0	0.8	7.4	0.8	24.4	25.7	3.6	20.9	21.9
LnGrp Delay(d),s/veh	43.6	0.0	54.4	62.7	44.7	60.8	16.9	27.2	27.9	32.9	23.6	23.4
LnGrp LOS	D		D	E	D	E	B	C	C	C	C	C
Approach Vol, veh/h		184			459			1773			1776	
Approach Delay, s/veh		50.8			60.7			27.2			24.4	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	95.4	13.0	21.6	9.1	96.3	9.2	25.4
Change Period (Y+Rc), s	3.0	6.5	3.0	6.5	3.0	6.5	3.0	6.5
Max Green Setting (Gmax), s	10.0	71.5	10.0	29.5	10.0	71.5	10.0	29.5
Max Q Clear Time (g_c+I1), s	6.3	49.5	12.0	10.3	3.6	42.4	5.6	17.2
Green Ext Time (p_c), s	0.1	22.0	0.0	2.2	0.0	29.0	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	182	112	23	342	20	61	4	32	17	12	28
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	26	212	130	27	398	23	71	5	37	20	14	33
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	421			342			819	802	277	819	844	398
vC1, stage 1 conf vol							328	328		451	451	
vC2, stage 2 conf vol							491	474		367	393	
vCu, unblocked vol	421			307			798	781	240	798	824	398
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			84	99	95	96	97	95
cM capacity (veh/h)	1149			1228			441	467	781	468	462	656

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	367	424	23	76	37	66
Volume Left	26	27	0	71	0	20
Volume Right	130	0	23	0	37	33
cSH	1149	1228	1700	443	781	543
Volume to Capacity	0.02	0.02	0.01	0.17	0.05	0.12
Queue Length 95th (ft)	2	2	0	15	4	10
Control Delay (s)	0.8	0.7	0.0	14.8	9.8	12.5
Lane LOS	A	A		B	A	B
Approach Delay (s)	0.8	0.7		13.2		12.5
Approach LOS				B		B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	316	2	0	431	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	343	2	0	468	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.97		0.97	0.97
vC, conflicting volume			346		813	345
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			307		790	305
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1224		350	715

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	346	0	468	1
Volume Left	0	0	0	0
Volume Right	2	0	0	1
cSH	1700	1700	1700	715
Volume to Capacity	0.20	0.00	0.28	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	10.0
Lane LOS				B
Approach Delay (s)	0.0	0.0		10.0
Approach LOS				B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	28	90	178	34	192	66	1249	147	142	1638	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	190.0	190.0	190.0	177.6	188.1	190.0	186.7	190.0	190.0	186.3	190.0
Adj Flow Rate, veh/h	66	30	98	193	37	209	72	1358	160	154	1780	26
Adj No. of Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	7	1	0	2	2	0	2	2
Cap, veh/h	298	50	164	277	281	253	198	1856	217	254	2089	30
Arrive On Green	0.05	0.13	0.13	0.08	0.16	0.16	0.05	0.58	0.58	0.06	0.58	0.58
Sat Flow, veh/h	1810	392	1282	1810	1776	1599	1810	3199	375	1810	3572	52
Grp Volume(v), veh/h	66	0	128	193	37	209	72	749	769	154	880	926
Grp Sat Flow(s),veh/h/ln	1810	0	1674	1810	1776	1599	1810	1773	1800	1810	1770	1854
Q Serve(g_s), s	3.8	0.0	8.9	10.0	2.2	15.6	1.9	37.8	38.6	4.2	50.6	51.0
Cycle Q Clear(g_c), s	3.8	0.0	8.9	10.0	2.2	15.6	1.9	37.8	38.6	4.2	50.6	51.0
Prop In Lane	1.00		0.77	1.00		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	298	0	214	277	281	253	198	1029	1045	254	1035	1084
V/C Ratio(X)	0.22	0.00	0.60	0.70	0.13	0.83	0.36	0.73	0.74	0.61	0.85	0.85
Avail Cap(c_a), veh/h	353	0	401	277	425	383	250	1029	1045	299	1035	1084
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	0.0	50.7	43.2	44.6	50.2	22.9	18.8	18.9	19.7	21.1	21.2
Incr Delay (d2), s/veh	0.3	0.0	3.8	7.0	0.3	11.0	0.8	4.5	4.6	2.0	8.8	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	4.3	1.9	1.1	7.7	1.4	19.6	20.4	3.1	27.0	28.5
LnGrp Delay(d),s/veh	43.4	0.0	54.5	50.2	44.9	61.3	23.7	23.3	23.6	21.7	29.9	29.8
LnGrp LOS	D		D	D	D	E	C	C	C	C	C	C
Approach Vol, veh/h		194			439			1590			1960	
Approach Delay, s/veh		50.7			55.0			23.5			29.2	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	94.8	13.0	22.3	9.4	95.3	9.3	26.0
Change Period (Y+Rc), s	3.0	6.5	3.0	6.5	3.0	6.5	3.0	6.5
Max Green Setting (Gmax), s	10.0	71.5	10.0	29.5	10.0	71.5	10.0	29.5
Max Q Clear Time (g_c+I1), s	6.2	40.6	12.0	10.9	3.9	53.0	5.8	17.6
Green Ext Time (p_c), s	0.1	30.9	0.0	2.3	0.0	18.5	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	171	122	25	254	8	87	7	30	20	7	59
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	24	173	123	25	257	8	88	7	30	20	7	60
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.98			0.98	0.98	0.98	0.98	0.98	
vC, conflicting volume	265			296			653	598	234	624	652	257
vC1, stage 1 conf vol							283	283		307	307	
vC2, stage 2 conf vol							370	315		317	344	
vCu, unblocked vol	265			266			632	576	203	602	630	257
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			83	99	96	96	99	92
cM capacity (veh/h)	1311			1278			512	550	823	552	530	787

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	320	282	8	95	30	87
Volume Left	24	25	0	88	0	20
Volume Right	123	0	8	0	30	60
cSH	1311	1278	1700	514	823	691
Volume to Capacity	0.02	0.02	0.00	0.18	0.04	0.13
Queue Length 95th (ft)	1	2	0	17	3	11
Control Delay (s)	0.8	0.9	0.0	13.6	9.5	11.0
Lane LOS	A	A		B	A	B
Approach Delay (s)	0.8	0.8		12.6		11.0
Approach LOS				B		B

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	317	0	1	399	5	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	323	0	1	407	5	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.97		0.97	0.97
vC, conflicting volume			323		733	323
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			288		710	288
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1248		391	734

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	323	1	407	5
Volume Left	0	1	0	5
Volume Right	0	0	0	0
cSH	1700	1248	1700	391
Volume to Capacity	0.19	0.00	0.24	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.0	7.9	0.0	14.3
Lane LOS		A		B
Approach Delay (s)	0.0	0.0		14.3
Approach LOS				B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	31.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	8	37	113	11	112	38	1092	100	92	1347	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	185.4	190.0	188.1	174.3	186.3	190.0	183.0	190.0	188.1	181.1	190.0
Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Cap, veh/h	250	32	156	312	292	265	231	1963	180	290	2138	47
Arrive On Green	0.02	0.12	0.12	0.08	0.17	0.17	0.05	0.59	0.59	0.06	0.61	0.61
Sat Flow, veh/h	1810	275	1342	1792	1743	1583	1810	3304	302	1792	3531	78
Grp Volume(v), veh/h	16	0	53	133	13	132	45	710	693	108	812	808
Grp Sat Flow(s),veh/h/ln	1810	1854	1617	1792	1743	1583	1810	1830	1777	1792	1811	1798
Q Serve(g_s), s	0.9	0.0	3.6	7.1	0.8	9.1	1.1	31.0	31.3	2.6	38.6	38.8
Cycle Q Clear(g_c), s	0.9	0.0	3.6	7.1	0.8	9.1	1.1	31.0	31.3	2.6	38.6	38.8
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.17	1.00		0.04
Lane Grp Cap(c), veh/h	250	0	188	312	292	265	231	1087	1055	290	1097	1088
V/C Ratio(X)	0.06	0.00	0.28	0.43	0.04	0.50	0.19	0.65	0.66	0.37	0.74	0.74
Avail Cap(c_a), veh/h	357	0	396	326	427	388	300	1087	1055	338	1097	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.9	0.0	48.6	36.3	42.0	45.5	14.8	16.2	16.3	13.5	17.0	17.0
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.7	0.1	2.1	0.3	3.1	3.2	0.6	4.5	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	1.6	3.3	0.3	3.9	0.5	14.3	14.0	1.1	18.1	18.0
Lane Grp Delay (d), s/veh	45.0	0.0	49.8	37.0	42.1	47.6	15.1	19.3	19.5	14.0	21.5	21.6
Lane Grp LOS	D		D	D	D	D	B	B	B	B	C	C
Approach Vol, veh/h		69			278			1448			1728	
Approach Delay, s/veh		48.6			42.3			19.2			21.1	
Approach LOS		D			D			B			C	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	5.9	20.5		12.1	26.7		8.4	78.0		9.8	79.4	
Change Period (Y+Rc), s	3.0	6.5		3.0	6.5		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	10.0	29.5		10.0	29.5		10.0	71.5		10.0	71.5	
Max Q Clear Time (g_c+I1), s	2.9	5.6		9.1	11.1		3.1	33.3		4.6	40.8	
Green Ext Time (p_c), s	0.0	1.2		0.0	1.1		0.0	38.1		0.1	30.6	

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Notes

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	78	13	36	13	78	13	36
Maximum Split (%)	9.3%	55.7%	9.3%	25.7%	9.3%	55.7%	9.3%	25.7%
Minimum Split (s)	10	39.5	10	32.5	10	39.5	10	32.5
Yellow Time (s)	3	4.5	3	4.5	3	4.5	3	4.5
All-Red Time (s)	0	2	0	2	0	2	0	2
Minimum Initial (s)	7	33	7	14	7	33	7	14
Vehicle Extension (s)	2.5	7	2.5	4	2.5	7	2.5	4
Minimum Gap (s)	2.5	7	2.5	4	2.5	7	2.5	4
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		5		5		5		5
Flash Dont Walk (s)		16		21		16		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	88	101	39	52	88	101	39	52
End Time (s)	101	39	52	88	101	39	52	88
Yield/Force Off (s)	98	32.5	49	81.5	98	32.5	49	81.5
Yield/Force Off 170(s)	98	16.5	49	60.5	98	16.5	49	60.5
Local Start Time (s)	127	0	78	91	127	0	78	91
Local Yield (s)	137	71.5	88	120.5	137	71.5	88	120.5
Local Yield 170(s)	137	55.5	88	99.5	137	55.5	88	99.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 101 (72%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 3: Randall Rd & Prairie St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	175	15	4	222	3	5	0	3	2	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	184	16	4	234	3	5	0	3	2	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	237			200			454	448	192	448	453	234
vC1, stage 1 conf vol							203	203		242	242	
vC2, stage 2 conf vol							252	245		206	211	
vCu, unblocked vol	237			193			449	443	185	443	447	234
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	100	100	99
cM capacity (veh/h)	1342			1385			665	630	858	675	630	810

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	205	238	3	5	3	13
Volume Left	5	4	0	5	0	2
Volume Right	16	0	3	0	3	8
cSH	1342	1385	1700	665	858	750
Volume to Capacity	0.00	0.00	0.00	0.01	0.00	0.02
Queue Length 95th (ft)	0	0	0	1	0	1
Control Delay (s)	0.2	0.2	0.0	10.5	9.2	9.9
Lane LOS	A	A		B	A	A
Approach Delay (s)	0.2	0.2		10.0		9.9
Approach LOS				A		A

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	27.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	194	6	1	234	2	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	209	6	1	252	2	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.99		0.99	0.99
vC, conflicting volume			215		340	212
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			198		324	195
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			1368		641	809

Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1
Volume Total	215	1	126	126	3
Volume Left	0	1	0	0	2
Volume Right	6	0	0	0	1
cSH	1700	1368	1700	1700	689
Volume to Capacity	0.13	0.00	0.07	0.07	0.00
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	0.0	7.6	0.0	0.0	10.3
Lane LOS		A			B
Approach Delay (s)	0.0	0.0			10.3
Approach LOS					B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	20.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	36	79	239	26	210	57	1505	157	168	1524	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	190.0	190.0	190.0	190.0	188.1	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Cap, veh/h	302	71	157	291	314	264	225	1912	197	207	2137	29
Arrive On Green	0.05	0.13	0.13	0.08	0.17	0.17	0.05	0.58	0.58	0.06	0.58	0.58
Sat Flow, veh/h	1810	528	1166	1810	1900	1599	1810	3323	342	1810	3668	50
Grp Volume(v), veh/h	62	0	122	254	28	223	61	889	879	179	823	820
Grp Sat Flow(s),veh/h/ln	1810	1900	1694	1810	1900	1599	1810	1863	1802	1810	1863	1854
Q Serve(g_s), s	3.6	0.0	8.3	10.0	1.6	16.8	1.6	48.1	50.2	4.9	41.0	41.2
Cycle Q Clear(g_c), s	3.6	0.0	8.3	10.0	1.6	16.8	1.6	48.1	50.2	4.9	41.0	41.2
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.19	1.00		0.03
Lane Grp Cap(c), veh/h	302	0	228	291	314	264	225	1072	1037	207	1085	1080
V/C Ratio(X)	0.21	0.00	0.53	0.87	0.09	0.84	0.27	0.83	0.85	0.86	0.76	0.76
Avail Cap(c_a), veh/h	358	0	402	291	451	380	281	1072	1037	251	1085	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	0.0	50.1	44.9	43.9	50.3	17.2	21.4	21.9	27.3	19.4	19.4
Incr Delay (d2), s/veh	0.2	0.0	2.8	23.9	0.2	13.2	0.5	7.4	8.6	21.3	5.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.7	0.0	3.8	1.9	0.8	7.9	0.7	23.7	24.2	7.0	19.8	19.7
Lane Grp Delay (d), s/veh	43.0	0.0	52.9	68.7	44.1	63.5	17.7	28.8	30.4	48.6	24.4	24.5
Lane Grp LOS	D		D	E	D	E	B	C	C	D	C	C
Approach Vol, veh/h		184			505			1829			1822	
Approach Delay, s/veh		49.6			65.1			29.2			26.8	
Approach LOS		D			E			C			C	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	9.2	23.2		13.0	27.0		9.1	78.0		10.0	78.9	
Change Period (Y+Rc), s	3.0	6.5		3.0	6.5		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	10.0	29.5		10.0	29.5		10.0	71.5		10.0	71.5	
Max Q Clear Time (g_c+I1), s	5.6	10.3		12.0	18.8		3.6	52.2		6.9	43.2	
Green Ext Time (p_c), s	0.0	2.3		0.0	1.7		0.0	19.3		0.1	28.3	

Intersection Summary	
HCM 2010 Ctrl Delay	33.2
HCM 2010 LOS	C

Notes

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	78	13	36	13	78	13	36
Maximum Split (%)	9.3%	55.7%	9.3%	25.7%	9.3%	55.7%	9.3%	25.7%
Minimum Split (s)	10	39.5	10	32.5	10	39.5	10	32.5
Yellow Time (s)	3	4.5	3	4.5	3	4.5	3	4.5
All-Red Time (s)	0	2	0	2	0	2	0	2
Minimum Initial (s)	7	33	7	14	7	33	7	14
Vehicle Extension (s)	2.5	7	2.5	4	2.5	7	2.5	4
Minimum Gap (s)	2.5	7	2.5	4	2.5	7	2.5	4
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		5		5		5		5
Flash Dont Walk (s)		16		21		16		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	128	1	79	92	128	1	79	92
End Time (s)	1	79	92	128	1	79	92	128
Yield/Force Off (s)	138	72.5	89	121.5	138	72.5	89	121.5
Yield/Force Off 170(s)	138	56.5	89	100.5	138	56.5	89	100.5
Local Start Time (s)	127	0	78	91	127	0	78	91
Local Yield (s)	137	71.5	88	120.5	137	71.5	88	120.5
Local Yield 170(s)	137	55.5	88	99.5	137	55.5	88	99.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	115
Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 3: Randall Rd & Prairie St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	203	112	23	359	20	61	4	32	17	12	28
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	26	236	130	27	417	23	71	5	37	20	14	33
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	441			366			863	847	301	863	888	417
vC1, stage 1 conf vol							352	352		471	471	
vC2, stage 2 conf vol							510	494		392	417	
vCu, unblocked vol	441			332			843	827	265	843	870	417
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			83	99	95	96	97	95
cM capacity (veh/h)	1130			1202			426	453	756	451	448	640

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	392	444	23	76	37	66
Volume Left	26	27	0	71	0	20
Volume Right	130	0	23	0	37	33
cSH	1130	1202	1700	427	756	526
Volume to Capacity	0.02	0.02	0.01	0.18	0.05	0.13
Queue Length 95th (ft)	2	2	0	16	4	11
Control Delay (s)	0.8	0.7	0.0	15.2	10.0	12.8
Lane LOS	A	A		C	B	B
Approach Delay (s)	0.8	0.7		13.5		12.8
Approach LOS				B		B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	321	39	6	442	32	16
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	349	42	7	480	35	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			391		623	370
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			349		590	327
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		92	97
cM capacity (veh/h)			1176		425	650

Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1
Volume Total	391	7	240	240	52
Volume Left	0	7	0	0	35
Volume Right	42	0	0	0	17
cSH	1700	1176	1700	1700	480
Volume to Capacity	0.23	0.01	0.14	0.14	0.11
Queue Length 95th (ft)	0	0	0	0	9
Control Delay (s)	0.0	8.1	0.0	0.0	13.4
Lane LOS		A			B
Approach Delay (s)	0.0	0.1			13.4
Approach LOS					B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	28	90	217	34	215	66	1270	182	167	1665	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	190.0	190.0	190.0	177.6	188.1	190.0	186.7	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Cap, veh/h	309	56	183	293	306	275	191	1821	259	240	2108	30
Arrive On Green	0.05	0.14	0.14	0.08	0.17	0.17	0.05	0.57	0.57	0.06	0.58	0.58
Sat Flow, veh/h	1810	392	1282	1810	1776	1599	1810	3200	455	1810	3664	53
Grp Volume(v), veh/h	66	0	128	236	37	234	72	800	778	182	918	918
Grp Sat Flow(s),veh/h/ln	1810	1900	1674	1810	1776	1599	1810	1867	1787	1810	1863	1854
Q Serve(g_s), s	3.8	0.0	8.9	10.0	2.2	17.8	2.0	40.6	41.8	5.2	51.9	52.3
Cycle Q Clear(g_c), s	3.8	0.0	8.9	10.0	2.2	17.8	2.0	40.6	41.8	5.2	51.9	52.3
Prop In Lane	1.00		0.77	1.00		1.00	1.00		0.25	1.00		0.03
Lane Grp Cap(c), veh/h	309	0	239	293	306	275	191	1062	1017	240	1072	1067
V/C Ratio(X)	0.21	0.00	0.54	0.81	0.12	0.85	0.38	0.75	0.77	0.76	0.86	0.86
Avail Cap(c_a), veh/h	362	0	393	293	417	375	242	1062	1017	279	1072	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	50.0	43.6	44.0	50.5	24.1	20.4	20.7	23.8	22.3	22.4
Incr Delay (d2), s/veh	0.3	0.0	2.7	14.6	0.2	14.6	0.9	4.9	5.5	9.1	8.8	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.8	0.0	4.1	3.8	1.0	8.5	1.3	19.9	19.9	6.5	26.1	26.4
Lane Grp Delay (d), s/veh	42.7	0.0	52.7	58.2	44.2	65.1	25.0	25.4	26.2	32.9	31.2	31.5
Lane Grp LOS	D		D	E	D	E	C	C	C	C	C	C
Approach Vol, veh/h		194			507			1650			2018	
Approach Delay, s/veh		49.3			60.4			25.7			31.5	
Approach LOS		D			E			C			C	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	9.3	24.4		13.0	28.1		9.4	78.0		10.2	78.8	
Change Period (Y+Rc), s	3.0	6.5		3.0	6.5		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	10.0	29.5		10.0	29.5		10.0	71.5		10.0	71.5	
Max Q Clear Time (g_c+I1), s	5.8	10.9		12.0	19.8		4.0	43.8		7.2	54.3	
Green Ext Time (p_c), s	0.0	2.5		0.0	1.8		0.0	27.7		0.1	17.2	

Intersection Summary	
HCM 2010 Ctrl Delay	33.5
HCM 2010 LOS	C

Notes

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	78	13	36	13	78	13	36
Maximum Split (%)	9.3%	55.7%	9.3%	25.7%	9.3%	55.7%	9.3%	25.7%
Minimum Split (s)	10	39.5	10	32.5	10	39.5	10	32.5
Yellow Time (s)	3	4.5	3	4.5	3	4.5	3	4.5
All-Red Time (s)	0	2	0	2	0	2	0	2
Minimum Initial (s)	7	33	7	14	7	33	7	14
Vehicle Extension (s)	2.5	7	2.5	4	2.5	7	2.5	4
Minimum Gap (s)	2.5	7	2.5	4	2.5	7	2.5	4
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		5		5		5		5
Flash Dont Walk (s)		16		21		16		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	128	1	79	92	128	1	79	92
End Time (s)	1	79	92	128	1	79	92	128
Yield/Force Off (s)	138	72.5	89	121.5	138	72.5	89	121.5
Yield/Force Off 170(s)	138	56.5	89	100.5	138	56.5	89	100.5
Local Start Time (s)	127	0	78	91	127	0	78	91
Local Yield (s)	137	71.5	88	120.5	137	71.5	88	120.5
Local Yield 170(s)	137	55.5	88	99.5	137	55.5	88	99.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	115
Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 3: Randall Rd & Prairie St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	197	122	215	277	8	87	7	30	20	7	59
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	24	199	123	217	280	8	88	7	30	20	7	60
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.98			0.98	0.98	0.98	0.98	0.98	
vC, conflicting volume	288			322			1086	1031	261	1057	1085	280
vC1, stage 1 conf vol							309	309		714	714	
vC2, stage 2 conf vol							777	722		343	371	
vCu, unblocked vol	288			293			1076	1020	230	1046	1075	280
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			83			66	98	96	93	98	92
cM capacity (veh/h)	1286			1249			258	317	795	300	303	764

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	346	497	8	95	30	87
Volume Left	24	217	0	88	0	20
Volume Right	123	0	8	0	30	60
cSH	1286	1249	1700	262	795	515
Volume to Capacity	0.02	0.17	0.00	0.36	0.04	0.17
Queue Length 95th (ft)	1	16	0	40	3	15
Control Delay (s)	0.7	4.7	0.0	26.4	9.7	13.4
Lane LOS	A	A		D	A	B
Approach Delay (s)	0.7	4.6		22.3		13.4
Approach LOS				C		B

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	322	55	11	412	53	21
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	329	56	11	420	54	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			385		589	357
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			343		555	314
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		88	97
cM capacity (veh/h)			1183		445	663

Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1
Volume Total	385	11	210	210	76
Volume Left	0	11	0	0	54
Volume Right	56	0	0	0	21
cSH	1700	1183	1700	1700	491
Volume to Capacity	0.23	0.01	0.12	0.12	0.15
Queue Length 95th (ft)	0	1	0	0	13
Control Delay (s)	0.0	8.1	0.0	0.0	13.7
Lane LOS		A			B
Approach Delay (s)	0.0	0.2			13.7
Approach LOS					B

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	31.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	8	37	165	11	144	38	1084	154	126	1338	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	185.4	190.0	188.1	174.3	186.3	190.0	183.1	190.0	188.1	181.1	190.0
Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Cap, veh/h	244	32	155	323	303	275	230	1849	261	274	2122	47
Arrive On Green	0.02	0.12	0.12	0.08	0.17	0.17	0.05	0.59	0.59	0.06	0.60	0.60
Sat Flow, veh/h	1810	275	1342	1792	1743	1583	1810	3141	443	1792	3531	78
Grp Volume(v), veh/h	16	0	53	194	13	169	45	740	716	148	806	803
Grp Sat Flow(s),veh/h/ln	1810	1854	1617	1792	1743	1583	1810	1831	1753	1792	1811	1798
Q Serve(g_s), s	0.9	0.0	3.6	10.0	0.8	12.0	1.1	33.9	34.5	3.7	38.9	39.1
Cycle Q Clear(g_c), s	0.9	0.0	3.6	10.0	0.8	12.0	1.1	33.9	34.5	3.7	38.9	39.1
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.25	1.00		0.04
Lane Grp Cap(c), veh/h	244	0	186	323	303	275	230	1078	1032	274	1089	1080
V/C Ratio(X)	0.07	0.00	0.28	0.60	0.04	0.62	0.20	0.69	0.69	0.54	0.74	0.74
Avail Cap(c_a), veh/h	349	0	393	323	423	385	298	1078	1032	319	1089	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	0.0	49.1	37.6	41.8	46.4	15.1	17.2	17.4	16.7	17.4	17.5
Incr Delay (d2), s/veh	0.1	0.0	1.2	2.7	0.1	3.2	0.3	3.6	3.8	1.2	4.5	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	0.4	0.0	1.6	5.0	0.3	5.1	0.5	15.9	15.4	2.1	18.2	18.1
Lane Grp Delay (d), s/veh	45.5	0.0	50.3	40.3	41.9	49.6	15.4	20.8	21.2	18.0	22.0	22.1
Lane Grp LOS	D		D	D	D	D	B	C	C	B	C	C
Approach Vol, veh/h		69			376			1501			1757	
Approach Delay, s/veh		49.2			44.5			20.8			21.7	
Approach LOS		D			D			C			C	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	5.9	20.5		13.0	27.6		8.5	78.0		10.0	79.5	
Change Period (Y+Rc), s	3.0	6.5		3.0	6.5		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	10.0	29.5		10.0	29.5		10.0	71.5		10.0	71.5	
Max Q Clear Time (g_c+I1), s	2.9	5.6		12.0	14.0		3.1	36.5		5.7	41.1	
Green Ext Time (p_c), s	0.0	1.4		0.0	1.2		0.0	34.9		0.1	30.3	

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Notes

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	78	13	36	13	78	13	36
Maximum Split (%)	9.3%	55.7%	9.3%	25.7%	9.3%	55.7%	9.3%	25.7%
Minimum Split (s)	10	39.5	10	32.5	10	39.5	10	32.5
Yellow Time (s)	3	4.5	3	4.5	3	4.5	3	4.5
All-Red Time (s)	0	2	0	2	0	2	0	2
Minimum Initial (s)	7	33	7	14	7	33	7	14
Vehicle Extension (s)	2.5	7	2.5	4	2.5	7	2.5	4
Minimum Gap (s)	2.5	7	2.5	4	2.5	7	2.5	4
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		5		5		5		5
Flash Dont Walk (s)		16		21		16		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	88	101	39	52	88	101	39	52
End Time (s)	101	39	52	88	101	39	52	88
Yield/Force Off (s)	98	32.5	49	81.5	98	32.5	49	81.5
Yield/Force Off 170(s)	98	16.5	49	60.5	98	16.5	49	60.5
Local Start Time (s)	127	0	78	91	127	0	78	91
Local Yield (s)	137	71.5	88	120.5	137	71.5	88	120.5
Local Yield 170(s)	137	55.5	88	99.5	137	55.5	88	99.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 101 (72%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 3: Randall Rd & Prairie St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	204	15	4	252	3	5	0	3	2	2	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	215	16	4	265	3	5	0	3	2	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked												
vC, conflicting volume	268			231			516	510	223	510	515	265
vC1, stage 1 conf vol							233	233		274	274	
vC2, stage 2 conf vol							283	277		236	241	
vCu, unblocked vol	268			231			516	510	223	510	515	265
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	100	100	99
cM capacity (veh/h)	1307			1349			630	603	822	640	602	778

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	236	269	3	5	3	13
Volume Left	5	4	0	5	0	2
Volume Right	16	0	3	0	3	8
cSH	1307	1349	1700	630	822	717
Volume to Capacity	0.00	0.00	0.00	0.01	0.00	0.02
Queue Length 95th (ft)	0	0	0	1	0	1
Control Delay (s)	0.2	0.1	0.0	10.8	9.4	10.1
Lane LOS	A	A		B	A	B
Approach Delay (s)	0.2	0.1		10.2		10.1
Approach LOS				B		B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	28.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	193	95	16	249	71	31
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	208	102	17	268	76	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.98		0.98	0.98
vC, conflicting volume			310		427	259
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			280		400	228
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		86	96
cM capacity (veh/h)			1263		561	762

Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1
Volume Total	310	17	134	134	110
Volume Left	0	17	0	0	76
Volume Right	102	0	0	0	33
cSH	1700	1263	1700	1700	610
Volume to Capacity	0.18	0.01	0.08	0.08	0.18
Queue Length 95th (ft)	0	1	0	0	16
Control Delay (s)	0.0	7.9	0.0	0.0	12.2
Lane LOS		A			B
Approach Delay (s)	0.0	0.5			12.2
Approach LOS					B

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	36	79	262	26	223	57	1502	179	182	1520	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	190.0	190.0	190.0	190.0	188.1	190.0	186.3	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Cap, veh/h	306	75	167	296	328	276	222	1830	214	220	2134	29
Arrive On Green	0.05	0.14	0.14	0.08	0.17	0.17	0.05	0.56	0.56	0.07	0.58	0.58
Sat Flow, veh/h	1810	528	1166	1810	1900	1599	1810	3274	384	1810	3668	50
Grp Volume(v), veh/h	62	0	122	279	28	237	61	899	889	194	821	818
Grp Sat Flow(s),veh/h/ln	1810	1900	1694	1810	1900	1599	1810	1863	1795	1810	1863	1854
Q Serve(g_s), s	3.7	0.0	8.5	10.0	1.6	18.4	1.8	52.6	55.4	7.1	42.1	42.3
Cycle Q Clear(g_c), s	3.7	0.0	8.5	10.0	1.6	18.4	1.8	52.6	55.4	7.1	42.1	42.3
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	306	0	242	296	328	276	222	1041	1003	220	1084	1079
V/C Ratio(X)	0.20	0.00	0.50	0.94	0.09	0.86	0.27	0.86	0.89	0.88	0.76	0.76
Avail Cap(c_a), veh/h	360	0	391	296	438	369	276	1041	1003	232	1084	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	50.6	47.5	44.5	51.4	17.7	24.1	24.7	35.7	20.0	20.0
Incr Delay (d2), s/veh	0.2	0.0	2.3	36.8	0.2	16.1	0.5	9.5	11.4	29.1	4.9	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.7	0.0	3.9	3.0	0.8	8.9	0.8	26.7	27.6	8.2	20.4	20.6
Lane Grp Delay (d), s/veh	43.5	0.0	52.9	84.3	44.6	67.5	18.2	33.5	36.1	64.8	24.9	25.0
Lane Grp LOS	D		D	F	D	E	B	C	D	E	C	C
Approach Vol, veh/h		184			544			1849			1833	
Approach Delay, s/veh		49.8			75.0			34.3			29.2	
Approach LOS		D			E			C			C	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	9.2	24.8		13.0	28.6		9.2	78.0		12.2	81.0	
Change Period (Y+Rc), s	3.0	6.5		3.0	6.5		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	10.0	29.5		10.0	29.5		10.0	71.5		10.0	71.5	
Max Q Clear Time (g_c+I1), s	5.7	10.5		12.0	20.4		3.8	57.4		9.1	44.3	
Green Ext Time (p_c), s	0.0	2.4		0.0	1.6		0.0	14.1		0.0	27.2	

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Notes

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	78	13	36	13	78	13	36
Maximum Split (%)	9.3%	55.7%	9.3%	25.7%	9.3%	55.7%	9.3%	25.7%
Minimum Split (s)	10	39.5	10	32.5	10	39.5	10	32.5
Yellow Time (s)	3	4.5	3	4.5	3	4.5	3	4.5
All-Red Time (s)	0	2	0	2	0	2	0	2
Minimum Initial (s)	7	33	7	14	7	33	7	14
Vehicle Extension (s)	2.5	7	2.5	4	2.5	7	2.5	4
Minimum Gap (s)	2.5	7	2.5	4	2.5	7	2.5	4
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		5		5		5		5
Flash Dont Walk (s)		16		21		16		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	128	1	79	92	128	1	79	92
End Time (s)	1	79	92	128	1	79	92	128
Yield/Force Off (s)	138	72.5	89	121.5	138	72.5	89	121.5
Yield/Force Off 170(s)	138	56.5	89	100.5	138	56.5	89	100.5
Local Start Time (s)	127	0	78	91	127	0	78	91
Local Yield (s)	137	71.5	88	120.5	137	71.5	88	120.5
Local Yield 170(s)	137	55.5	88	99.5	137	55.5	88	99.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	125
Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 3: Randall Rd & Prairie St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	215	112	23	371	20	61	4	32	17	12	28
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	26	250	130	27	431	23	71	5	37	20	14	33
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	455			380			891	874	315	891	916	431
vC1, stage 1 conf vol							366	366		485	485	
vC2, stage 2 conf vol							524	508		406	431	
vCu, unblocked vol	455			347			873	856	280	873	899	431
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			83	99	95	96	97	95
cM capacity (veh/h)	1117			1188			416	445	742	440	439	628

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	406	458	23	76	37	66
Volume Left	26	27	0	71	0	20
Volume Right	130	0	23	0	37	33
cSH	1117	1188	1700	417	742	516
Volume to Capacity	0.02	0.02	0.01	0.18	0.05	0.13
Queue Length 95th (ft)	2	2	0	16	4	11
Control Delay (s)	0.8	0.7	0.0	15.5	10.1	13.0
Lane LOS	A	A		C	B	B
Approach Delay (s)	0.8	0.7		13.7		13.0
Approach LOS				B		B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	320	76	12	448	62	29
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	348	83	13	487	67	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			430		659	389
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			384		622	341
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		83	95
cM capacity (veh/h)			1136		401	633

Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1
Volume Total	430	13	243	243	99
Volume Left	0	13	0	0	67
Volume Right	83	0	0	0	32
cSH	1700	1136	1700	1700	454
Volume to Capacity	0.25	0.01	0.14	0.14	0.22
Queue Length 95th (ft)	0	1	0	0	21
Control Delay (s)	0.0	8.2	0.0	0.0	15.1
Lane LOS		A			C
Approach Delay (s)	0.0	0.2			15.1
Approach LOS					C

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	28	90	262	34	242	66	1264	225	196	1657	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	190.0	190.0	190.0	190.0	177.6	188.1	190.0	186.8	190.0	190.0	186.3	190.0
Lanes	1	1	0	1	1	1	1	2	0	1	2	0
Cap, veh/h	318	62	204	309	332	299	184	1700	299	238	2084	30
Arrive On Green	0.05	0.16	0.16	0.08	0.19	0.19	0.05	0.55	0.55	0.07	0.57	0.57
Sat Flow, veh/h	1810	392	1282	1810	1776	1599	1810	3096	544	1810	3664	53
Grp Volume(v), veh/h	66	0	128	285	37	263	72	822	797	213	914	913
Grp Sat Flow(s),veh/h/ln	1810	1900	1674	1810	1776	1599	1810	1868	1772	1810	1863	1854
Q Serve(g_s), s	3.9	0.0	9.1	10.0	2.3	20.8	2.2	46.1	48.1	7.0	54.1	54.5
Cycle Q Clear(g_c), s	3.9	0.0	9.1	10.0	2.3	20.8	2.2	46.1	48.1	7.0	54.1	54.5
Prop In Lane	1.00		0.77	1.00		1.00	1.00		0.31	1.00		0.03
Lane Grp Cap(c), veh/h	318	0	266	309	332	299	184	1026	973	238	1059	1054
V/C Ratio(X)	0.21	0.00	0.48	0.92	0.11	0.88	0.39	0.80	0.82	0.89	0.86	0.87
Avail Cap(c_a), veh/h	368	0	379	309	402	362	233	1026	973	251	1059	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	49.9	47.5	44.0	51.5	25.3	23.6	24.1	30.6	23.8	23.9
Incr Delay (d2), s/veh	0.2	0.0	1.9	31.8	0.2	20.0	1.0	6.6	7.7	29.5	9.3	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.8	0.0	4.1	2.7	1.1	10.3	1.3	22.9	22.9	9.2	27.6	27.6
Lane Grp Delay (d), s/veh	42.7	0.0	51.8	79.3	44.2	71.6	26.3	30.2	31.8	60.1	33.1	33.4
Lane Grp LOS	D		D	E	D	E	C	C	C	E	C	C
Approach Vol, veh/h		194			585			1691			2040	
Approach Delay, s/veh		48.7			73.6			30.8			36.0	
Approach LOS		D			E			C			D	

Timer												
Assigned Phs	7	4		3	8		5	2		1	6	
Phs Duration (G+Y+Rc), s	9.4	27.2		13.0	30.8		9.5	78.0		12.0	80.6	
Change Period (Y+Rc), s	3.0	6.5		3.0	6.5		3.0	6.5		3.0	6.5	
Max Green Setting (Gmax), s	10.0	29.5		10.0	29.5		10.0	71.5		10.0	71.5	
Max Q Clear Time (g_c+I1), s	5.9	11.1		12.0	22.8		4.2	50.1		9.0	56.5	
Green Ext Time (p_c), s	0.0	2.6		0.0	1.5		0.0	21.4		0.0	15.0	

Intersection Summary	
HCM 2010 Ctrl Delay	39.5
HCM 2010 LOS	D

Notes

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	78	13	36	13	78	13	36
Maximum Split (%)	9.3%	55.7%	9.3%	25.7%	9.3%	55.7%	9.3%	25.7%
Minimum Split (s)	10	39.5	10	32.5	10	39.5	10	32.5
Yellow Time (s)	3	4.5	3	4.5	3	4.5	3	4.5
All-Red Time (s)	0	2	0	2	0	2	0	2
Minimum Initial (s)	7	33	7	14	7	33	7	14
Vehicle Extension (s)	2.5	7	2.5	4	2.5	7	2.5	4
Minimum Gap (s)	2.5	7	2.5	4	2.5	7	2.5	4
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		5		5		5		5
Flash Dont Walk (s)		16		21		16		21
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	128	1	79	92	128	1	79	92
End Time (s)	1	79	92	128	1	79	92	128
Yield/Force Off (s)	138	72.5	89	121.5	138	72.5	89	121.5
Yield/Force Off 170(s)	138	56.5	89	100.5	138	56.5	89	100.5
Local Start Time (s)	127	0	78	91	127	0	78	91
Local Yield (s)	137	71.5	88	120.5	137	71.5	88	120.5
Local Yield 170(s)	137	55.5	88	99.5	137	55.5	88	99.5

Intersection Summary	
Cycle Length	140
Control Type	Actuated-Coordinated
Natural Cycle	115
Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 3: Randall Rd & Prairie St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	222	122	215	302	8	87	7	30	20	7	59
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	24	224	123	217	305	8	88	7	30	20	7	60
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		315										
pX, platoon unblocked				0.98			0.98	0.98	0.98	0.98	0.98	
vC, conflicting volume	313			347			1137	1082	286	1108	1135	305
vC1, stage 1 conf vol							334	334		739	739	
vC2, stage 2 conf vol							803	747		368	396	
vCu, unblocked vol	313			325			1130	1074	262	1100	1128	305
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			82			64	98	96	93	98	92
cM capacity (veh/h)	1259			1222			247	305	766	285	290	739

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	372	522	8	95	30	87
Volume Left	24	217	0	88	0	20
Volume Right	123	0	8	0	30	60
cSH	1259	1222	1700	250	766	494
Volume to Capacity	0.02	0.18	0.00	0.38	0.04	0.18
Queue Length 95th (ft)	1	16	0	42	3	16
Control Delay (s)	0.7	4.7	0.0	27.9	9.9	13.8
Lane LOS	A	A		D	A	B
Approach Delay (s)	0.7	4.6		23.5		13.8
Approach LOS				C		B

Intersection Summary			
Average Delay	6.1		
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	321	128	23	425	112	47
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	328	131	23	434	114	48
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	188					
pX, platoon unblocked			0.95		0.95	0.95
vC, conflicting volume			458		657	393
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			409		617	340
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		71	92
cM capacity (veh/h)			1108		399	632

Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1
Volume Total	458	23	217	217	162
Volume Left	0	23	0	0	114
Volume Right	131	0	0	0	48
cSH	1700	1108	1700	1700	447
Volume to Capacity	0.27	0.02	0.13	0.13	0.36
Queue Length 95th (ft)	0	2	0	0	41
Control Delay (s)	0.0	8.3	0.0	0.0	17.6
Lane LOS		A			C
Approach Delay (s)	0.0	0.4			17.6
Approach LOS					C

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

Drive-Thru Queuing

Starbuck's Drive-thru Survey		
338 Randall Rd., South Elgin, IL		
Wednesday, June 20, 2012		
Time	All cars	Max Que
6:30 AM	15	3
6:45	18	6
7:00	15	7
7:15	13	4
7:30	20	7
7:45	19	8
8:00	17	7
8:15	15	5
8:30	18	8
8:45	12	5
9:00	9	4
9:15	11	5

Starbuck's Drive-thru Survey		
198 W. Roosevelt Rd., Villa Park, IL		
Monday, July 28, 2014		
Time	All cars	Max Que
6:30 AM	10	3
6:45	12	4
7:00	14	3
7:15	17	6
7:30	14	5
7:45	12	4
8:00	21	8
8:15	13	4
8:30	--	--
8:45	--	--
9:00	--	--
9:15	--	--

Starbuck's Drive-thru Survey		
775 S. Rand Rd., Lake Zurich, IL		
Wednesday, June 20, 2012		
Time	All cars	Max Que
6:30 AM	5	3
6:45	14	5
7:00	17	5
7:15	18	6
7:30	11	4
7:45	15	4
8:00	14	4
8:15	12	3
8:30	15	3
8:45	11	3
9:00	14	6
9:15	15	6

Average for three sites. (Max Que)
3
5
5
5
5
5
6
4
6
4
5
6

Traffic Counts

PROJECT: 14.03.2900
DATE: 7/16/2014
DAY: WEDNESDAY
WEATHER: SUNNY
COUNT TIME: 6:00 AM - 9:00 AM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

RANDALL RD. & PRAIRIE ST.

15 MIN BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	139	10	149	6	174	1	181	1	0	0	1	6	1	11	18	349
6:15 AM	1	212	6	219	7	219	0	226	0	0	2	2	10	0	8	18	465
6:30 AM	1	212	13	226	13	301	0	314	0	1	2	3	12	1	20	33	576
6:45 AM	4	251	29	284	19	284	1	304	0	0	2	2	13	0	21	34	624
7:00 AM	2	202	24	228	13	268	2	283	1	1	3	5	10	0	29	39	555
7:15 AM	8	237	23	268	24	270	2	296	0	1	9	10	9	0	20	29	603
7:30 AM	3	285	29	317	30	320	2	352	1	3	2	6	10	2	26	38	713
7:45 AM	9	315	33	357	20	300	5	325	3	3	3	9	26	2	18	46	737
8:00 AM	9	279	28	316	23	287	18	328	3	3	10	16	21	4	25	50	710
8:15 AM	2	280	20	302	16	318	1	335	4	0	5	9	33	3	28	64	710
8:30 AM	11	223	23	257	29	300	6	335	1	1	8	10	25	2	24	51	653
8:45 AM	16	289	23	328	20	416	5	441	6	4	14	24	31	2	33	66	859
TOTAL:	66	2924	261	3251	220	3457	43	3720	20	17	60	97	206	17	263	486	7554

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

RANDALL RD. & PRAIRIE ST.

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	6	814	58	878	45	978	2	1025	1	1	6	8	41	2	60	103	2014
6:15 AM	8	877	72	957	52	1072	3	1127	1	2	9	12	45	1	78	124	2220
6:30 AM	15	902	89	1006	69	1123	5	1197	1	3	16	20	44	1	90	135	2358
6:45 AM	17	975	105	1097	86	1142	7	1235	2	5	16	23	42	2	96	140	2495
7:00 AM	22	1039	109	1170	87	1158	11	1256	5	8	17	30	55	4	93	152	2608
7:15 AM	29	1116	113	1258	97	1177	27	1301	7	10	24	41	66	8	89	163	2763
7:30 AM	23	1159	110	1292	89	1225	26	1340	11	9	20	40	90	11	97	198	2870
7:45 AM	31	1097	104	1232	88	1205	30	1323	11	7	26	44	105	11	95	211	2810
8:00 AM	38	1071	94	1203	88	1321	30	1439	14	8	37	59	110	11	110	231	2932

PEAK HOUR SUMMARY

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
8:00 AM	38	1071	94	1203	88	1321	30	1439	14	8	37	59	110	11	110	231	2932
																PHF =	1.03

PROJECT: 14.03.2900
DATE: 7/16/2014
DAY: WEDNESDAY
WEATHER: SUNNY
COUNT TIME: 6:00 AM - 9:00 AM

15 MINUTE SUMMARY OF INDIVIDUAL TRUCK MOVEMENTS

RANDALL RD. & PRAIRIE ST.

15 MIN BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	8	1	9	0	11	0	11	0	0	0	0	0	0	0	0	20
6:15 AM	0	9	0	9	1	5	0	6	0	0	0	0	0	0	1	1	16
6:30 AM	0	14	0	14	0	15	0	15	0	0	0	0	0	0	4	4	33
6:45 AM	0	8	0	8	0	15	0	15	0	0	0	0	0	0	0	0	23
7:00 AM	0	11	1	12	0	13	0	13	0	0	0	0	0	0	0	0	25
7:15 AM	0	11	0	11	1	14	0	15	0	0	0	0	0	0	0	0	26
7:30 AM	0	17	0	17	2	14	0	16	0	0	0	0	0	0	1	1	34
7:45 AM	0	13	1	14	2	11	0	13	0	0	0	0	0	0	0	0	27
8:00 AM	0	12	1	13	0	19	0	19	0	0	0	0	1	0	0	1	33
8:15 AM	0	5	0	5	0	14	0	14	0	0	0	0	0	0	0	0	19
8:30 AM	0	11	1	12	1	17	0	18	0	0	0	0	0	0	1	1	31
8:45 AM	0	19	0	19	0	19	0	19	0	0	1	1	0	1	1	2	41
TOTAL:	0	138	5	143	7	167	0	174	0	0	1	1	1	1	8	10	328

HOURLY SUMMARY OF INDIVIDUAL TRUCK MOVEMENTS

RANDALL RD. & PRAIRIE ST.

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	39	1	40	1	46	0	47	0	0	0	0	0	0	5	5	92
6:15 AM	0	42	1	43	1	48	0	49	0	0	0	0	0	0	5	5	97
6:30 AM	0	44	1	45	1	57	0	58	0	0	0	0	0	0	4	4	107
6:45 AM	0	47	1	48	3	56	0	59	0	0	0	0	0	0	1	1	108
7:00 AM	0	52	2	54	5	52	0	57	0	0	0	0	0	0	1	1	112
7:15 AM	0	53	2	55	5	58	0	63	0	0	0	0	1	0	1	2	120
7:30 AM	0	47	2	49	4	58	0	62	0	0	0	0	1	0	1	2	113
7:45 AM	0	41	3	44	3	61	0	64	0	0	0	0	1	0	1	2	110
8:00 AM	0	47	2	49	1	69	0	70	0	0	1	1	1	1	2	4	124

PEAK HOUR SUMMARY

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
8:00 AM	0	47	2	49	1	69	0	70	0	0	1	1	1	1	2	4	124
																PHF =	0.94

PROJECT: 14.03.2900
DATE: 7/16/2014
DAY: WEDNESDAY
WEATHER: SUNNY
COUNT TIME: 4:00 PM - 6:00 PM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

RANDALL RD. & PRAIRIE ST.

15 MIN BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	17	412	43	472	30	377	12	419	12	5	13	30	45	2	55	102	1023
4:15 PM	20	386	26	432	33	305	9	347	16	3	31	50	43	6	47	96	925
4:30 PM	17	388	34	439	41	402	8	451	11	9	17	37	64	8	47	119	1046
4:45 PM	12	329	23	364	41	353	2	396	13	8	19	40	53	2	52	107	907
5:00 PM	8	391	31	430	38	354	4	396	11	9	17	37	45	9	40	94	957
5:15 PM	20	371	43	434	31	388	7	426	23	10	26	59	51	7	53	111	1030
5:30 PM	15	280	27	322	28	365	10	403	11	7	16	34	30	5	53	88	847
5:45 PM	10	367	31	408	42	417	10	469	20	10	15	45	34	6	49	89	1011
TOTAL:	119	2924	258	3301	284	2961	62	3307	117	61	154	332	365	45	396	806	7746

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

RANDALL RD. & PRAIRIE ST.

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	66	1515	126	1707	145	1437	31	1613	52	25	80	157	205	18	201	424	3901
4:15 PM	57	1494	114	1665	153	1414	23	1590	51	29	84	164	205	25	186	416	3835
4:30 PM	57	1479	131	1667	151	1497	21	1669	58	36	79	173	213	26	192	431	3940
4:45 PM	55	1371	124	1550	138	1460	23	1621	58	34	78	170	179	23	198	400	3741
5:00 PM	53	1409	132	1594	139	1524	31	1694	65	36	74	175	160	27	195	382	3845

PEAK HOUR SUMMARY

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:30 PM	57	1479	131	1667	151	1497	21	1669	58	36	79	173	213	26	192	431	3940
																PHF =	0.94

PROJECT: 14.03.2900
DATE: 7/16/2014
DAY: WEDNESDAY
WEATHER: SUNNY
COUNT TIME: 4:00 PM - 6:00 PM

15 MINUTE SUMMARY OF INDIVIDUAL TRUCK MOVEMENTS

RANDALL RD. & PRAIRIE ST.

15 MIN BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	0	14	1	15	2	16	0	18	0	0	0	0	0	0	0	0	33
4:15 PM	0	8	0	8	0	5	0	5	0	0	0	0	0	0	1	1	14
4:30 PM	0	5	1	6	0	6	0	6	0	0	0	0	0	0	0	0	12
4:45 PM	0	1	1	2	0	8	0	8	0	0	0	0	0	0	0	0	10
5:00 PM	0	12	0	12	0	6	0	6	0	0	0	0	0	0	1	1	19
5:15 PM	0	8	1	9	0	5	0	5	0	0	0	0	0	0	0	0	14
5:30 PM	0	8	0	8	0	9	0	9	0	0	0	0	0	0	0	0	17
5:45 PM	0	8	0	8	1	5	0	6	0	0	0	0	0	0	0	0	14
TOTAL:	0	64	4	68	3	60	0	63	0	0	0	0	0	0	2	2	133

HOURLY SUMMARY OF INDIVIDUAL TRUCK MOVEMENTS

RANDALL RD. & PRAIRIE ST.

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	0	28	3	31	2	35	0	37	0	0	0	0	0	0	1	1	69
4:15 PM	0	26	2	28	0	25	0	25	0	0	0	0	0	0	2	2	55
4:30 PM	0	26	3	29	0	25	0	25	0	0	0	0	0	0	1	1	55
4:45 PM	0	29	2	31	0	28	0	28	0	0	0	0	0	0	1	1	60
5:00 PM	0	36	1	37	1	25	0	26	0	0	0	0	0	0	1	1	64

PEAK HOUR SUMMARY

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	0	28	3	31	2	35	0	37	0	0	0	0	0	0	1	1	69
																PHF =	0.52

PROJECT: 14.03.2900
DATE: 7/12/2014
DAY: SATURDAY
WEATHER: SUNNY
COUNT TIME: 11:00 AM - 1:00 PM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

RANDALL RD. & PRAIRIE ST.

15 MIN BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	16	298	29	343	22	334	9	365	9	5	25	39	48	8	41	97	844
11:15 AM	14	283	44	341	34	324	4	362	15	7	25	47	44	8	48	100	850
11:30 AM	24	317	36	377	32	397	6	435	14	6	22	42	45	9	51	105	959
11:45 AM	15	294	33	342	31	402	3	436	12	10	26	48	45	11	49	105	931
12:00 PM	18	342	43	403	35	459	5	499	18	6	23	47	44	6	44	94	1043
12:15 PM	9	296	33	338	42	380	10	432	17	5	19	41	34	4	39	77	888
12:30 PM	25	323	43	391	38	318	6	362	12	11	13	36	32	8	50	90	879
12:45 PM	27	322	42	391	37	413	5	455	10	3	19	32	36	5	37	78	956
TOTAL:	148	2475	303	2926	271	3027	48	3346	107	53	172	332	328	59	359	746	7350

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

RANDALL RD. & PRAIRIE ST.

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	69	1192	142	1403	119	1457	22	1598	50	28	98	176	182	36	189	407	3584
11:15 AM	71	1236	156	1463	132	1582	18	1732	59	29	96	184	178	34	192	404	3783
11:30 AM	66	1249	145	1460	140	1638	24	1802	61	27	90	178	168	30	183	381	3821
11:45 AM	67	1255	152	1474	146	1559	24	1729	59	32	81	172	155	29	182	366	3741
12:00 PM	79	1283	161	1523	152	1570	26	1748	57	25	74	156	146	23	170	339	3766

PEAK HOUR SUMMARY

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:30 AM	66	1249	145	1460	140	1638	24	1802	61	27	90	178	168	30	183	381	3821
																PHF =	0.92

PROJECT: 14.03.2900
DATE: 7/12/2014
DAY: SATURDAY
WEATHER: SUNNY
COUNT TIME: 11:00 AM - 1:00 PM

15 MINUTE SUMMARY OF INDIVIDUAL TRUCK MOVEMENTS

RANDALL RD. & PRAIRIE ST.

15 MIN BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	0	8	0	8	0	4	0	4	0	0	0	0	0	0	1	1	13
11:15 AM	0	2	1	3	1	4	0	5	0	0	0	0	0	0	0	0	8
11:30 AM	0	8	0	8	1	6	0	7	0	0	0	0	0	0	1	1	16
11:45 AM	0	4	0	4	1	4	0	5	0	0	0	0	0	2	0	2	11
12:00 PM	0	8	0	8	0	6	0	6	0	0	0	0	0	0	1	1	15
12:15 PM	0	4	0	4	1	3	0	4	0	0	0	0	0	0	0	0	8
12:30 PM	0	4	0	4	0	9	0	9	0	0	0	0	0	0	0	0	13
12:45 PM	0	4	0	4	0	3	0	3	0	0	0	0	0	0	1	1	8
TOTAL:	0	42	1	43	4	39	0	43	0	0	0	0	0	2	4	6	92

HOURLY SUMMARY OF INDIVIDUAL TRUCK MOVEMENTS

RANDALL RD. & PRAIRIE ST.

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	0	22	1	23	3	18	0	21	0	0	0	0	0	2	2	4	48
11:15 AM	0	22	1	23	3	20	0	23	0	0	0	0	0	2	2	4	50
11:30 AM	0	24	0	24	3	19	0	22	0	0	0	0	0	2	2	4	50
11:45 AM	0	20	0	20	2	22	0	24	0	0	0	0	0	2	1	3	47
12:00 PM	0	20	0	20	1	21	0	22	0	0	0	0	0	0	2	2	44

PEAK HOUR SUMMARY

HOUR BEGIN	RANDALL RD.								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:30 AM	0	24	0	24	3	19	0	22	0	0	0	0	0	2	2	4	50
																PHF =	0.78

PROJECT: 14.03.2900
DATE: 7/16/2014
DAY: WEDNESDAY
WEATHER: SUNNY
COUNT TIME: 6:00 AM - 9:00 AM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

SITE DRIVE & PRAIRIE ST.

15 MIN BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	0	0	0	0	0	0	0	0	16	0	16	0	18	0	18	34
6:15 AM	0	0	0	0	0	0	0	0	0	13	0	13	0	18	0	18	31
6:30 AM	0	0	0	0	0	0	0	0	0	27	0	27	0	33	0	33	60
6:45 AM	0	0	0	0	0	0	0	0	0	48	0	48	0	34	0	34	82
7:00 AM	0	0	0	0	0	0	0	0	0	38	0	38	0	39	0	39	77
7:15 AM	0	0	0	0	0	0	0	0	0	48	0	48	0	29	0	29	77
7:30 AM	0	0	0	0	0	0	0	0	0	62	0	62	0	38	0	38	100
7:45 AM	0	0	0	0	0	0	0	0	0	56	0	56	0	46	0	46	102
8:00 AM	0	0	0	0	0	0	0	0	0	54	0	54	0	50	0	50	104
8:15 AM	0	0	0	0	0	0	0	0	0	36	0	36	0	64	0	64	100
8:30 AM	0	0	0	0	0	0	0	0	0	53	0	53	0	51	0	51	104
8:45 AM	0	0	0	0	0	0	0	0	0	47	0	47	0	66	0	66	113
TOTAL:	0	0	0	0	0	0	0	0	0	498	0	498	0	486	0	486	984

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

SITE DRIVE & PRAIRIE ST.

HOUR BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	0	0	0	0	0	0	0	0	104	0	104	0	103	0	103	207
6:15 AM	0	0	0	0	0	0	0	0	0	126	0	126	0	124	0	124	250
6:30 AM	0	0	0	0	0	0	0	0	0	161	0	161	0	135	0	135	296
6:45 AM	0	0	0	0	0	0	0	0	0	196	0	196	0	140	0	140	336
7:00 AM	0	0	0	0	0	0	0	0	0	204	0	204	0	152	0	152	356
7:15 AM	0	0	0	0	0	0	0	0	0	220	0	220	0	163	0	163	383
7:30 AM	0	0	0	0	0	0	0	0	0	208	0	208	0	198	0	198	406
7:45 AM	0	0	0	0	0	0	0	0	0	199	0	199	0	211	0	211	410
8:00 AM	0	0	0	0	0	0	0	0	0	190	0	190	0	231	0	231	421

PEAK HOUR SUMMARY

HOUR BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
8:00 AM	0	0	0	0	0	0	0	0	0	190	0	190	0	231	0	231	421
																PHF =	0.93

PROJECT: 14.03.2900
DATE: 7/16/2014
DAY: WEDNESDAY
WEATHER: SUNNY
COUNT TIME: 4:00 PM - 6:00 PM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

SITE DRIVE & PRAIRIE ST.

15 MIN BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	0	0	0	0	0	0	0	0	0	78	0	78	0	102	0	102	180
4:15 PM	0	0	0	0	0	0	0	0	0	62	0	62	0	96	0	96	158
4:30 PM	0	0	1	1	0	0	0	0	0	84	0	84	0	119	0	119	204
4:45 PM	0	0	0	0	0	0	0	0	0	71	1	72	0	107	0	107	179
5:00 PM	0	0	0	0	0	0	0	0	0	78	0	78	0	94	0	94	172
5:15 PM	0	0	0	0	0	0	0	0	0	83	1	84	0	111	0	111	195
5:30 PM	0	0	0	0	0	0	0	0	0	61	1	62	0	88	0	88	150
5:45 PM	0	0	0	0	0	0	0	0	0	83	0	83	0	89	0	89	172
TOTAL:	0	0	1	1	0	0	0	0	0	600	3	603	0	806	0	806	1410

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

SITE DRIVE & PRAIRIE ST.

HOUR BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	0	0	1	1	0	0	0	0	0	295	1	296	0	424	0	424	721
4:15 PM	0	0	1	1	0	0	0	0	0	295	1	296	0	416	0	416	713
4:30 PM	0	0	1	1	0	0	0	0	0	316	2	318	0	431	0	431	750
4:45 PM	0	0	0	0	0	0	0	0	0	293	3	296	0	400	0	400	696
5:00 PM	0	0	0	0	0	0	0	0	0	305	2	307	0	382	0	382	689

PEAK HOUR SUMMARY

HOUR BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:30 PM	0	0	1	1	0	0	0	0	0	316	2	318	0	431	0	431	750
																PHF =	0.92

PROJECT: 14.03.2900
DATE: 7/12/2014
DAY: SATURDAY
WEATHER: SUNNY
COUNT TIME: 11:00 AM - 1:00 PM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

SITE DRIVE & PRAIRIE ST.

15 MIN BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	0	0	0	0	0	0	0	0	0	56	0	56	1	97	0	98	154
11:15 AM	1	0	0	1	0	0	0	0	0	85	0	85	0	99	0	99	185
11:30 AM	2	0	0	2	0	0	0	0	0	74	0	74	1	103	0	104	180
11:45 AM	1	0	0	1	0	0	0	0	0	74	0	74	0	104	0	104	179
12:00 PM	1	0	0	1	0	0	0	0	0	84	0	84	0	93	0	93	178
12:15 PM	0	0	0	0	0	0	0	0	0	80	0	80	0	77	0	77	157
12:30 PM	1	0	0	1	0	0	0	0	0	92	0	92	0	89	0	89	182
12:45 PM	2	0	0	2	0	0	0	0	0	82	0	82	0	76	0	76	160
TOTAL:	8	0	0	8	0	0	0	0	0	627	0	627	2	738	0	740	1375

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

SITE DRIVE & PRAIRIE ST.

HOUR BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	4	0	0	4	0	0	0	0	0	289	0	289	2	403	0	405	698
11:15 AM	5	0	0	5	0	0	0	0	0	317	0	317	1	399	0	400	722
11:30 AM	4	0	0	4	0	0	0	0	0	312	0	312	1	377	0	378	694
11:45 AM	3	0	0	3	0	0	0	0	0	330	0	330	0	363	0	363	696
12:00 PM	4	0	0	4	0	0	0	0	0	338	0	338	0	335	0	335	677

PEAK HOUR SUMMARY

HOUR BEGIN	SITE DRIVE								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:15 AM	5	0	0	5	0	0	0	0	0	317	0	317	1	399	0	400	722
																PHF =	0.98

PROJECT: 14.03.2900
DATE: 7/15/2014
DAY: TUESDAY
WEATHER: SUNNY
COUNT TIME: 6:00 AM - 9:00 AM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

JEWEL ACCESS & PRAIRIE ST.

15 MIN BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	0	0	0	0	0	0	0	0	14	2	16	0	18	2	20	36
6:15 AM	0	0	0	0	0	0	0	0	0	13	0	13	0	18	0	18	31
6:30 AM	0	0	1	1	0	0	0	0	0	25	2	27	0	33	3	36	64
6:45 AM	0	0	0	0	0	0	0	0	2	46	0	48	0	34	0	34	82
7:00 AM	0	0	1	1	0	0	1	1	1	35	2	38	0	38	0	38	78
7:15 AM	0	0	0	0	0	0	2	2	1	44	3	48	0	27	1	28	78
7:30 AM	1	0	0	1	0	0	0	0	1	60	1	62	0	37	1	38	101
7:45 AM	0	0	0	0	0	0	0	0	2	52	2	56	0	46	2	48	104
8:00 AM	1	0	1	2	0	0	2	2	2	48	4	54	2	47	1	50	108
8:15 AM	0	0	1	1	1	1	2	4	2	32	2	36	1	62	1	64	105
8:30 AM	2	0	0	2	1	1	2	4	0	46	7	53	0	47	1	48	107
8:45 AM	2	0	1	3	0	0	2	2	1	44	2	47	1	62	0	63	115
TOTAL:	6	0	5	11	2	2	11	15	12	459	27	498	4	469	12	485	1009

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

JEWEL ACCESS & PRAIRIE ST.

HOUR BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
6:00 AM	0	0	1	1	0	0	0	0	2	98	4	104	0	103	5	108	213
6:15 AM	0	0	2	2	0	0	1	1	3	119	4	126	0	123	3	126	255
6:30 AM	0	0	2	2	0	0	3	3	4	150	7	161	0	132	4	136	302
6:45 AM	1	0	1	2	0	0	3	3	5	185	6	196	0	136	2	138	339
7:00 AM	1	0	1	2	0	0	3	3	5	191	8	204	0	148	4	152	361
7:15 AM	2	0	1	3	0	0	4	4	6	204	10	220	2	157	5	164	391
7:30 AM	2	0	2	4	1	1	4	6	7	192	9	208	3	192	5	200	418
7:45 AM	3	0	2	5	2	2	6	10	6	178	15	199	3	202	5	210	424
8:00 AM	5	0	3	8	2	2	8	12	5	170	15	190	4	218	3	225	435

PEAK HOUR SUMMARY

HOUR BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
8:00 AM	5	0	3	8	2	2	8	12	5	170	15	190	4	218	3	225	435
																PHF =	0.95

PROJECT: 14.03.2900
DATE: 7/15/2014
DAY: TUESDAY
WEATHER: SUNNY
COUNT TIME: 4:00 PM - 6:00 PM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

JEWEL ACCESS & PRAIRIE ST.

15 MIN BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	17	1	11	29	3	3	8	14	5	40	33	78	6	77	1	84	205
4:15 PM	10	1	9	20	9	1	14	24	5	33	24	62	4	72	5	81	187
4:30 PM	16	2	16	34	6	4	9	19	4	53	27	84	11	94	6	111	248
4:45 PM	11	1	4	16	4	4	9	17	5	37	29	71	2	87	6	95	199
5:00 PM	13	1	8	22	0	2	9	11	6	37	35	78	6	72	4	82	193
5:15 PM	21	0	4	25	7	2	1	10	7	55	21	83	4	89	4	97	215
5:30 PM	17	3	8	28	4	0	6	10	4	31	26	61	6	65	1	72	171
5:45 PM	14	0	6	20	1	0	4	5	4	62	17	83	2	71	4	77	185
TOTAL:	119	9	66	194	34	16	60	110	40	348	212	600	41	627	31	699	1603

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

JEWEL ACCESS & PRAIRIE ST.

HOUR BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:00 PM	54	5	40	99	22	12	40	74	19	163	113	295	23	330	18	371	839
4:15 PM	50	5	37	92	19	11	41	71	20	160	115	295	23	325	21	369	827
4:30 PM	61	4	32	97	17	12	28	57	22	182	112	316	23	342	20	385	855
4:45 PM	62	5	24	91	15	8	25	48	22	160	111	293	18	313	15	346	778
5:00 PM	65	4	26	95	12	4	20	36	21	185	99	305	18	297	13	328	764

PEAK HOUR SUMMARY

HOUR BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
4:30 PM	61	4	32	97	17	12	28	57	22	182	112	316	23	342	20	385	855
																PHF =	0.86

PROJECT: 14.03.2900
DATE: 7/12/2014
DAY: SATURDAY
WEATHER: SUNNY
COUNT TIME: 11:00 AM - 1:00 PM

15 MINUTE SUMMARY OF ALL VEHICLE MOVEMENTS

JEWEL ACCESS & PRAIRIE ST.

15 MIN BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	11	3	8	22	6	2	18	26	6	31	19	56	4	69	3	76	180
11:15 AM	15	0	7	22	5	0	20	25	11	36	38	85	6	64	1	71	203
11:30 AM	26	3	6	35	9	3	19	31	3	42	29	74	4	59	2	65	205
11:45 AM	27	1	11	39	4	4	11	19	6	43	25	74	9	66	3	78	210
12:00 PM	19	3	6	28	2	0	9	11	4	50	30	84	6	65	2	73	196
12:15 PM	15	3	11	29	3	4	9	16	2	50	28	80	5	53	2	60	185
12:30 PM	24	1	10	35	6	1	7	14	1	52	39	92	7	58	2	67	208
12:45 PM	17	1	10	28	5	5	7	17	3	51	28	82	4	52	6	62	189
TOTAL:	154	15	69	238	40	19	100	159	36	355	236	627	45	486	21	552	1576

HOURLY SUMMARY OF ALL VEHICLE MOVEMENTS

JEWEL ACCESS & PRAIRIE ST.

HOUR BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:00 AM	79	7	32	118	24	9	68	101	26	152	111	289	23	258	9	290	798
11:15 AM	87	7	30	124	20	7	59	86	24	171	122	317	25	254	8	287	814
11:30 AM	87	10	34	131	18	11	48	77	15	185	112	312	24	243	9	276	796
11:45 AM	85	8	38	131	15	9	36	60	13	195	122	330	27	242	9	278	799
12:00 PM	75	8	37	120	16	10	32	58	10	203	125	338	22	228	12	262	778

PEAK HOUR SUMMARY

HOUR BEGIN	JEWEL ACCESS								PRAIRIE ST.								INTER-SECTION TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
11:15 AM	87	7	30	124	20	7	59	86	24	171	122	317	25	254	8	287	814
																PHF =	0.99

Refer to:
Minutes 7-21-14
Page

City of St. Charles, Illinois

Ordinance No. 2014-Z-16

An Ordinance Granting Approval of Special Use for Planned Unit Development and PUD Preliminary Plan (600-660 S. Randall Road – Randall Shoppes)

Adopted by the

City Council

of the

City of St. Charles

July 21, 2014

Published in pamphlet form by authority of the City Council of the City of St. Charles, Kane and Du Page Counties, Illinois, July 25, 2014

Nancy Garrison
City Clerk

(S E A L)

IIC4

City of St. Charles
Ordinance No. 2014-Z-16

An Ordinance Granting Approval of Special Use for Planned Unit Development and PUD Preliminary Plan (600-660 S. Randall Road – Randall Shoppes)

WHEREAS, on or about May 22, 2014, Dyn Rote, LLC ("the Applicant") filed petitions for Special Use for Planned Unit Development and PUD Preliminary Plan for the real estate as legally described on Exhibit "A" attached hereto and incorporated herein (the "Subject Realty"), for the purposes of renovating the existing multi-tenant commercial building and expanding and reconstructing the parking lot at 600-660 S. Randall Road; and,

WHEREAS, the required Notice of Public Hearing on said petition for Special Use (Planned Unit Development) was published on or about May 30, 2014, in a newspaper having general circulation within the City, to-wit, the Kane County Chronicle newspaper, all as required by the statutes of the State of Illinois and the ordinances of the City; and,

WHEREAS, pursuant to said notice, the Plan Commission conducted a public hearing held on June 17, 2014 and continued to July 8, 2014, on said petitions in accordance with the statutes of the State of Illinois and the ordinances of the City; and,

WHEREAS, at said Public Hearing, the Applicant presented testimony in support of said petitions and all interested parties were afforded an opportunity to be heard; and,

WHEREAS, the Plan Commission recommended approval of said petitions on or about July 8, 2014; and,

WHEREAS, the Planning & Development Committee of the City Council recommended approval of said petitions on or about July 14, 2014; and,

WHEREAS, the City Council of the City of St. Charles has received the recommendations of the Plan Commission and Planning & Development Committee and has considered the same:

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ST. CHARLES, KANE AND DUPAGE COUNTIES, ILLINOIS, as follows:

1. The preambles set forth hereinabove are incorporated herein as substantive provisions of this Ordinance as though fully set out in this Section 1.

2. That passage of this Ordinance shall constitute approval of Special Use for Planned Unit Development pursuant to the provisions of Title 17 of the St. Charles Municipal Code, as amended, and based upon the Applicant's petitions and the evidence presented at the Public Hearing, the City Council hereby finds that the Planned Unit Development is in the public interest and adopts the Findings of Fact for Special Uses for Planned Unit Development, set forth on Exhibit "B", which is attached hereto and incorporated herein.

3. That passage of this Ordinance shall constitute approval of the PUD Preliminary Plan entitled "Preliminary Engineering Plan; CES, Inc.; dated 7/8/2014", "Landscape Plan", "Architectural Elevations; McClellan Blakemore; dated 2/10/2014", "Monument Sign Elevations; Image Signs; dated 3/5/2014", and "Parking Lot Lighting Plan; RAB Lighting; dated 6/10/2014", reduced copies of which are attached hereto and incorporated herein as Exhibit "C", such that these documents and illustrations are hereby approved subject to compliance with such conditions, corrections, and modifications as may be required by the Director of Community and Economic Development and the Director of Public Works to comply with the requirements of the St. Charles Municipal Code.

4. The Subject Realty shall be developed only in accordance with all ordinances of the City as now in effect and as hereafter amended (except as specifically varied herein), and subject to the terms, conditions and restrictions set forth herein, as follows:

a. Lot Area
   1. The required lot area shall be reduced from 1 acre to 0.991 acre.

b. Building Setbacks
   1. The required interior side (east) setback shall be reduced from 10 feet to 5.4 feet.
   2. The required rear (south) setback shall be reduced from 30 feet to 2.6 feet.

c. Parking Setbacks
   1. The required front (north) setback shall be reduced from 20 feet to 10 feet.
   2. The required exterior side (west) setback shall be reduced from 20 feet to 2.5 feet and the parking lot shall not be setback less than the distances depicted on the Preliminary Plan.

d. Landscaping
   1. The required percentage of the landscape area of the lot shall be reduced from 15 percent to 13 percent. A 24-foot wide driveway providing cross access to the property to the south may be added without regard to the required landscape percentage.

e. Signage
   1. The maximum sign height of 15 feet shall apply to freestanding signs. A decorative cap not to exceed 15 inches shall be permitted on the top of the existing freestanding sign for a total sign height of 16 feet 3 inches.

f. Sidewalk
   1. A sidewalk shall be installed along Randall Rd. subject to the approval of the Kane County Department of Transportation and the Director of Public Works.

5. That after the adoption and approval hereof, the Ordinance shall (i) be printed or published in book or pamphlet form, published by the authority of the Council, or (ii) within thirty (30) days after the adoption and approval hereof, be published in a newspaper published in and with a general circulation within the City of St. Charles.

PRESENTED to the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois this 21st day of July, 2014.

PASSED by the City Council of the City of St. Charles, Kane and DuPage Counties, Illinois this 21st day of July, 2014.

APPROVED by the Mayor of the City of St. Charles, Kane and DuPage Counties, Illinois this 21st day of July, 2014.

Raymond P. Rogina, Mayor

Attest:

Nancy Garrison

City Clerk

COUNCIL VOTE:

Ayes: 9
Nays: 0
Absent: 1
Abstain:

APPROVED AS TO FORM:

City Attorney

DATE: _____

Exhibit A

Subject Realty
Legal Description

LOT 1 OF JOE KEIM'S RANDALL RD SUBDIVISION, RECORDED AS DOCUMENT #1132323, IN THE CITY OF ST. CHARLES, KANE COUNTY, ILLINOIS.

Exhibit B

Findings of Fact

SPECIAL USE FOR A PLANNED UNIT DEVELOPMENT AT 600-660 S. RANDALL ROAD (RANDALL SHOPPES)

From the St. Charles Zoning Ordinance, Section 17.04.410.D.3:
The Plan Commission shall not favorably recommend, and the City Council shall not approve, a Special Use for a PUD or an amendment to a Special Use for a PUD unless they each make findings of fact based on the application and the evidence presented at the public hearing that the PUD is in the public interest, based on the following criteria:

i. The proposed PUD advances one or more of the purposes of the Planned Unit Development procedure stated Section 17.04.400.A.

This property was developed in a manner that has made the current configuration of the building and its associated parking obsolete. The granting of this special use permit for a PUD will allow us to redevelop the property in a manner that will satisfy the tenant standards for a modern building. This will also allow us to make more efficient use of the land in support of attracting tenants to this property and the community as a whole. Further, the proposed redevelopment provides for creative use of the existing site constraints and the building design that will take a clearly dated and obsolete overall design and create an attractive development out of what has become an eyesore, thus integrating this property into this area of the community that has seen a large amount of investment in more recent years.

ii. The proposed PUD and PUD Preliminary Plans conform to the requirements of the underlying zoning district or districts in which the PUD is located and to the applicable Design Review Standards contained in Chapter 17.06, except where:

a) Conforming to the requirements would inhibit creative design that serves community goals, or

b) Conforming to the requirements would be impractical and the proposed PUD will provide benefits that outweigh those that would have been realized by conforming to the applicable requirements.

The existing site has minimal landscaping, and the landscaping that is provided is deteriorated and generally poorly designed and implemented. The PUD proposal includes a significant upgrade to the landscaping that is clearly superior to the current design, which generally only has a few bushes and grass. In addition, the proposed redevelopment of the site provides for a much higher quality architectural design than that which is found in the building today.

iii. The proposed PUD conforms with the standards applicable to Special Uses (Section 17.04.330.C.2).

a. **Public Convenience: The Special Use will serve the public convenience at the proposed location.**

The granting of the special use permit for a PUD will permit the redevelopment of this site in a manner that will attract new business to the community and allow the use of what has become an obsolete building and site design.

b. **Sufficient Infrastructure: That adequate utilities, access roads, drainage and/or necessary facilities have been, or are being, provided.**

The property has direct access onto Prairie Street and that access will not change as part of this special use.

c. **Effect on Nearby Property: That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish or impair property values within the neighborhood.**

The granting of this special use will have no negative impact on the use and enjoyment of the surrounding properties, nor diminish or impair property values. The proposed redevelopment will significantly enhance the property which will only help the surrounding properties.

d. **Effect on Development of Surrounding Property: That the establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.**

The granting of this special use will not impede or otherwise impact the ability to develop or improve the surrounding properties. It is our hope that the investment of funds into the redevelopment of this site will encourage other properties in the vicinity to invest funds into their properties as well as enhancing the overall neighborhood. The use of the building following this permit will not change from its permitted uses as currently zoned.

e. **Effect on General Welfare: That the establishment, maintenance or operation of the Special Use will not be detrimental to or endanger the public health, safety, comfort or general welfare.**

The granting of this special use will enhance the general welfare of the community given the significant investment that will occur as part of this process, increasing the property value of the subject property as well as enhancing the area as a whole. There will be no detrimental effects to the health, safety, comfort or welfare of the community.

f. **Conformance with Codes: That the proposed Special Use conforms to all existing Federal, State and local legislation and regulation and meets or exceeds all applicable provisions of this Title, except as may be varied pursuant to a Special Use for Planned Unit Development.**

Except as varied pursuant to this request for a Special Use for PUD, this special use will conform to the existing Federal, State and local legislation and regulations, and will otherwise meet the requirements of this Title.

iv. The proposed PUD will be beneficial to the physical development, diversity, tax base and economic well-being of the City.

The site and building improvements that are part of this PUD request will result in an attractive modem building that will (1) benefit the physical development of the City, hopefully spurring other nearby property owners to make investments in their properties, (2) increase the value of the building and property, thus increasing the property taxes paid on the building, and (3) attracting new tenants to the community increasing the sales tax base and diversity of development.

v. The proposed PUD conforms to the purposes and intent of the Comprehensive Plan.

The Comprehensive plan provides that this property would be utilized as Corridor/Regional Commercial which is what this redevelopment will promote.

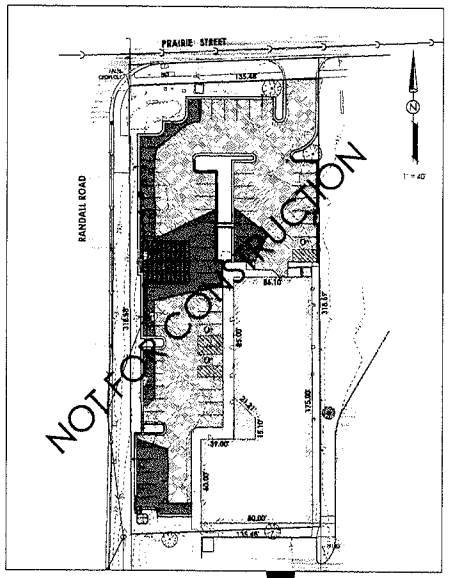
Exhibit C

PUD Preliminary Plans

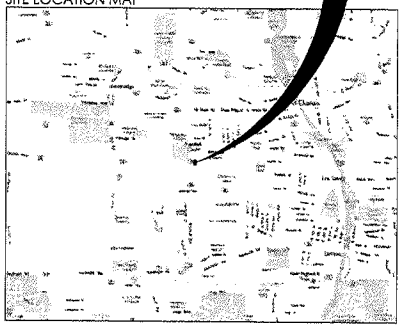
INDEX

Sheet #1	Cover
Sheet #2	Existing Conditions
Sheet #3	Overall Site Plan
Sheet #4	Grading & Storm Water Pollution Prevention Plan
Sheet #5	Details

600-660 S. Randall Road
St. Charles
2014



SITE LOCATION MAP



CONTACT:
J.U.L.I.E.
DIAL: 811
PRIOR TO ANY CONSTRUCTION

	Existing	Proposed
Right of Way	EX. ROW	ROW
Fence		
Utility Pole		
Utility Pole w/ street light		
Guy Anchor		
Street Light		
Gas Main	G	G
Overhead Electric Line	OHE	OHE
Underground Electric Line	UGE	UGE
Electric Pedestal	E	E
Electric Transformer	E	E
Overhead Telephone Line	OHT	OHT
Underground Telephone Line	UGT	UGT
Underground Fiber Optic Line	FO	FO
Telephone Pedestal	T	T
Valve Box & Valve		
Valve Vault & Valve		
Fire Hydrant with Valve Box		
Fire Hydrant		
Water Main	WM	WM
Water Service With Curb Stop Box		
Storm Manhole		
Storm Catch Basin		
Curb Inlet Type 700		
Storm Sewer		
Sanitary Manhole		
Sanitary Cleanout		
Sanitary Sewer		
Proposed Sanitary Service @ 1.0% Minimum		
Sign		
Property Line		
Building Setback Line		

Elevations are based on
City of St. Charles Vertical Control Network
Station STC 07 Elevation = 790.80 NAVD 88

Site Benchmark is finished floor of existing building = 792.66 NAVD 88

ADDRESS: 600-660 S. RANDALL RD.
ST. CHARLES, IL 60174
PIN: 09-33-302-001
LOT SIZE: 0.991 ACRES
LAND USE: EXISTING MULTI-TENANT COMMERCIAL/RETAIL BUILDING
ZONING: BC - COMMUNITY BUSINESS DISTRICT
SURROUNDING ZONING - ALL BC - COMMUNITY BUSINESS DISTRICT
EXISTING IMPERVIOUS AREA: 34097 S.F.
PROPOSED IMPERVIOUS AREA: 31087 S.F.

DEVELOPER:
DYN ROTE L.L.C.
6801 SPRING CREEK RD
ROCKFORD, IL 61114
(815) 229-3000

SEAL COVERS SHEETS 1-5

KEVIN C. BUNGE, PE
EXPIRES 11/30/2015
DATE

600-660 S. Randall Road
CITY OF St. Charles
Kane CO., IL

DEVELOPER:
First Rockford Group

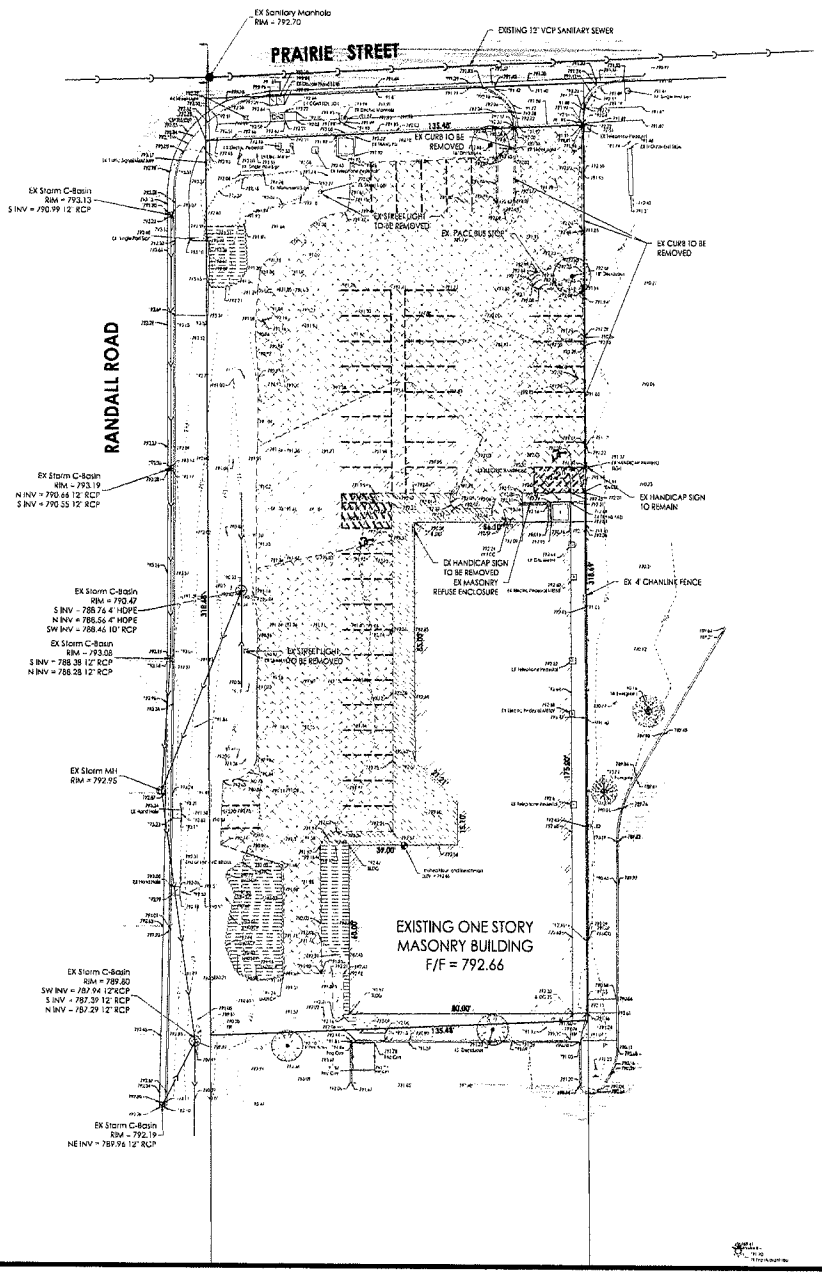
PREPARED BY: CES, INC., 700 W. LOCUST St.
DELVIDERE, IL 61008 PHONE: (815) 547-8425
FAX: (815) 544-0421
ILLINOIS DESIGN FIRM NO: 184-001260

Date	REVISION HISTORY
07/08/2014	REVISIONS PER CITY ETTR PLAN (07/23/2014)

NRI - No Known Impacts
AP - Approval Pending
APPD - Approved
N - Contactor Coordination Requested

AGENCY CONTACT	STATUS	COMMENTS
Gas Company		
Telephone 1		
Telephone 2		
Fiber Optics		
Cable TV		
Electric		
Regional Pipeline		
Other Overheads		
Other Underground		
Floodplain		
ACOE - Wetlands		
Natural Land Institute		
IL Nature Preserve Commission		
IEPA Sanitary		
IEPA Water		
IEPA NOI		
DNR - Endangered Species		
DNR - OWR		
FEMA (Flood Zones)		
NPA (Nitrates)		
Local Sanitary District		
Local Water District		
Local Drainage District		
Tollway		
County Highway Dept		
County Stormwater Agency		
Township		
Municipal - Engineering		
Municipal - Planning		
Local Fire Dept		
Final Plat Approval		
Park District/Forest Preserve		
IDOT - Access & Traffic		
IDOT - Drainage		
IDOT - Utilities		
IDOT - Landscaping		
IDOT - Local Roads		
SEWCOM/MCS		

JOB #3602



SCALE 1" = 20'

0 10 20 40

PAVEMENT LEGEND

- EX. HMA PAVEMENT
- EX. CONCRETE PAVEMENT/SIDEWALK
- EX. LANDSCAPED AREA
- EX. HMA TO BE REMOVED (SURFACE ONLY)
- EX. HMA TO BE REMOVED (FULL DEPTH)
- EX. CONCRETE SIDEWALK TO BE REMOVED
- EX. LANDSCAPED AREA TO BE REMOVED

CONTACT:
J.U.L.I.E.
DIAL: 811
PRIOR TO ANY CONSTRUCTION

Elevations are based on
City of St. Charles Vertical Control Network
Station STC 07 Elevation = 790.80 NAVD 88

Site Benchmark is finished floor of existing
building = 792.66 NAVD 88

07/08/2014

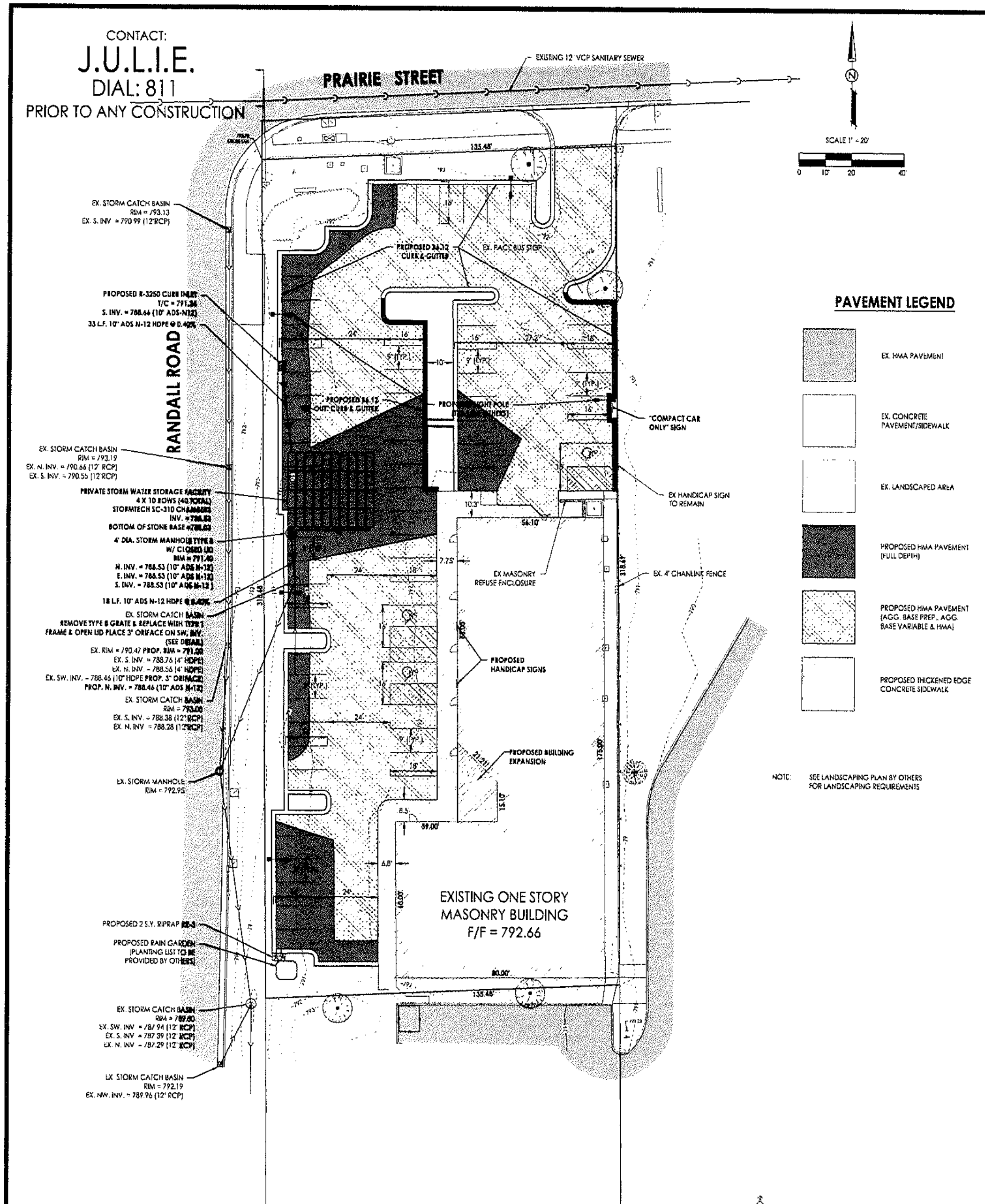
Date	Revision	By
7/8/14	REVISIONS PER CITY (LETTER DATED 7/3/2014)	JAB

600-660 S. Randall Road
Existing Conditions & Demolition Plan

CHECKED BY: RCS
DATE: 06/30/14
DRAWN BY: JAB
DATE: 06/30/14
3602_BASE.dwg

Sheet
2 of 5

700 WEST LOCUST ST., BELVIDERE, IL 61008
(815) 547-6401 FAX (815) 544-6401
ILLINOIS DESIGN FIRM NO. 184-001360



ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF ST. CHARLES STANDARDS.

THICKENED EDGE P.C. CONCRETE SIDEWALK (4")

THIS WORK SHALL CONFORM TO SECTION 424 OF THE STANDARD SPECIFICATIONS.

SURFACE SHALL BE SCORED IN FIVE (5) FOOT SQUARES WITH A DIRECTIONAL BROOM FINISH. TROWEL JOINTS, WHICH ARE AT RIGHT ANGLES TO THE EDGE OF THE WALK, SHOULD BE PLACED AT FIVE FOOT INTERVALS. THESE JOINTS SHALL BE AT LEAST 1-1/2 INCHES DEEP AND NOT LESS THAN 1/8 INCHES WIDE, BUT NO MORE THAN 1/4 INCH WIDE. THE CONCRETE SHALL BE STRUCK OFF, CONSOLIDATED, AND FINISHED TO A TRUE AND EVEN SURFACE. CONSOLIDATIONS SHALL BE BY VIBRATION WITH A VIBRATORY SCREED.

EXPANSION JOINTS (3/4 INCH) SHALL BE PLACED IN THE SIDEWALKS AT INTERVALS OF 40 FEET. THEY SHALL ALSO BE PLACED BETWEEN THE NEW SIDEWALKS AND THE EXISTING PAVEMENTS. ASPHALT JOINTS OR FIBER JOINTS WITH RUBBER JOINT SEALER MAY BE USED. EXPANSION JOINTS (½ INCH) SHALL BE PLACED BETWEEN ALL EXISTING STRUCTURES AND THE NEW SIDEWALKS.

SIDEWALKS SHALL BE 4 INCHES THICK PER TYPICAL SECTION ON SHEET 2 OF THE CONSTRUCTION DRAWINGS. A COMPACTED SUB-BASE SHALL BE BENEATH ALL SIDEWALK CONSTRUCTION AND IS INCIDENTAL TO THIS ITEM AND NO EXTRA COMPENSATION WILL BE AWARDED.

CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH ARTICLE 1022 OF THE STANDARD SPECIFICATIONS.

EARTH EXCAVATION SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS, INCLUDING EXCAVATION AND REMOVAL OF EARTH AND AGGREGATE MATERIALS, WHERE SIDEWALKS DO NOT EXIST CURRENTLY, AND GRADE TO ELEVATIONS AS DESIGNATED ON THE DRAWINGS.

RESTORATION ADJACENT TO THE PROPOSED SIDEWALK AND NOT SHOWN ON THESE PLANS (INCLUDING TOPSOIL, SEEDING AND MULCH) SHALL BE INCIDENTAL TO THE PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THIS ITEM WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR **THICKENED EDGE PORTLAND CEMENT CONCRETE SIDEWALK 4"** PRICE SHALL INCLUDE SUBGRADE PREPARATION.

4" TOPSOIL, CLASS 1A SEEDING, & MULCH METHOD 2 OR EROSION CONTROL BLANKET

THIS WORK SHALL CONSIST OF REPAIRING ALL DISTURBED AREAS WITH 4" OF TOPSOIL. TOPSOIL MATERIAL SHALL BE INDIGENOUS TO KANE COUNTY AND MAY BE USED PROVIDING IT MEETS WITH THE REQUIREMENTS OF ARTICLE 1081.05 OF THE STANDARD SPECIFICATIONS EROSION CONTROL BLANKET WORK SHALL CONSIST OF FURNISHING, TRANSPORTING, AND PLACING EROSION BLANKET, OVER SEEDED AREAS IN ACCORDANCE WITH IDOT SECTION 251 WITHIN 24 HOURS AFTER SEEDING OPERATIONS.

ALL TURF OR GRASS LAWN AREAS, NOT DESIGNATED FOR INSTALLATION OF NEW SIDEWALK, LANDSCAPING PLAN BY OTHERS, DRIVEWAY OR DISTURBED DURING CONSTRUCTION, SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER. RESTORATION OF THE PROJECT AREA SHALL BE COMPLETED ON A MONTHLY BASIS. RESTORATION SHALL INCLUDE BACKFILLING THE AREAS WITH SUITABLE EMBANKMENT MATERIAL AND A MINIMUM OF 4" OF TOPSOIL IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS. FINAL SHAPING, TRIMMING, AND FINISHING SHALL BE IN ACCORDANCE WITH SECTION 212 OR THE STANDARD SPECIFICATIONS. SEEDING SHALL BE A CLASS 1A SALT TOLERANT LAWN MIXTURE IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. MULCH METHOD 2 SHALL BE INSTALLED OVER ALL RESTORED AREAS IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS. MODIFY SECTION 250.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO INCLUDE THE CONTRACTOR GUARANTEE A 75 PERCENT UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA(S) AFTER ONE GROWING SEASON, WITH NO EXCEPTION TO THE TIMING OF THE SEEDING. AFTER ONE GROWING SEASON, AREAS NOT SUSTAINING 75 PERCENT UNIFORM GROWTH SHALL BE INTERSEEDED OR RESEEDED, AS DETERMINED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE CONTRACT.

GUARANTEE: ALL SEEDED AREAS SHALL BE MAINTAINED AS SPECIFIED INCLUDING WATERING FOR 30 DAYS AFTER INSTALLATION. SCATTERED BARE SPOTS NO LARGER THAN TWO SQUARE FOOT WILL BE ALLOWED UP TO A MAXIMUM OF 5% OF ANY SEEDED AREA. LARGER AREAS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL BE PAID INCIDENTAL TO THE PRICE BID PER HMA PAVEMENT.

EROSION AND SEDIMENT CONTROL

THIS ITEM INCLUDES FURNISHING ALL LABOR AND MATERIALS REQUIRED TO INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL ITEMS FOR THE DURATION OF THE PROJECT. EROSION CONTROL ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO SILT FENCE, TEMPORARY DITCH CHECK, INLET PROTECTION, AND RIPRAP. PRIOR TO DISTURBING THE SITE PERIMETER SILT FENCE SHALL BE INSTALLED AS INDICATED ON PLANS. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND INSTALL EROSION AND SEDIMENT CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND SEDIMENT AND EROSION CONTROL PLAN, AS WELL AS PER IDNR, USACE AND IDOT INCORPORATED BY REFERENCE IN THIS DOCUMENT. THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL ALSO MAINTAIN NECESSARY INSPECTIONS AND DOCUMENTATION TO SATISFY SWPPP REQUIREMENTS OF THE EPA PER GENERAL NPDES PERMIT NO. ILR10.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE OF LINEAR FEET FOR **SILT FENCE**, PER EACH FOR **INLET PROTECTION** AND LUMP SUM FOR **EROSION AND SEDIMENT CONTROL MAINTENANCE**.

AGGREGATE BASE COURSE, TYPE B, 10"

THIS WORK SHALL CONFORM TO SECTION 351 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR **AGGREGATE BASE COURSE, TYPE B, 10"**.

EX. AGGREGATE BASE PREP

THE CONTRACTOR SHALL PREPARE THE EXISTING AGGREGATE BASE, INCLUDING A VARIABLE DEPTH OF AGGREGATE BASE COURSE, TYPE B TO CONSTRUCT THE PARKING LOT TO THE PROPOSED GRADES.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR **EX. AGGREGATE BASE PREP**.

BITUMINOUS MATERIALS (PRIME COAT)

ASPHALT MC-30 SHALL BE USED FOR CONSTRUCTING THIS ITEM AND SHALL BE APPLIED AT THE RATE WITHIN THE LIMITS SPECIFIED IN THE STANDARD SPECIFICATIONS OR AS SPECIFIED BY THE ENGINEER. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER GALLON FOR **BITUMINOUS MATERIALS (PRIME COAT)**. CONTRACTOR SHALL PROVIDE TRUCK TICKETS PRIOR TO PAYMENT FOR THIS ITEM.

HOT MIX ASPHALT SURFACE COURSE, MIX C, N50, 1.5"

HOT MIX ASPHALT BINDER COURSE, N50, 1.5"

THIS ITEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS. HOT MIX ASPHALT SURFACE COURSE, MIX C, N50 & BINDER COURSE, N50.

VIBRATING ROLLERS WILL NOT BE ALLOWED UNLESS SPECIFIED BY THE ENGINEER. IN THE ABSENCE OF A VIBRATORY ROLLER, DENSITIES SHALL BE 93% MINIMUM UNLESS SPECIFIED BY THE ENGINEER.

IN SECTION 406.06 G THE PARAGRAPH STARTING WITH "JOINTS BETWEEN OLD AND NEW PAVEMENT..." SHALL BE MODIFIED TO READ: JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAY'S WORK OR WHEN THE TEMPERATURES OF THE PREVIOUSLY LAID MATERIALS DROPS BELOW 150 DEGREES, TO INSURE THOROUGH AND CONTINUOUS BOND, THE CONTACT SURFACE SHALL BE SPRAYED OR PAINTED WITH A THIN, UNIFORM COATING OF ASPHALT SS-1.

BASIS OF PAYMENT SHALL BE SQUARE YARD FOR **HOT MIX ASPHALT SURFACE COURSE, MIX C, N50, 1.5" & HOT MIX ASPHALT BINDER COURSE, N50, 1.5"**. RECYCLED MATERIAL WILL NOT BE ALLOWED.

WHITE PAINT PAVEMENT MARKING, 4"

THIS WORK SHALL CONFORM TO SECTION 780 OF THE STANDARD SPECIFICATIONS AND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PAINT SHALL BE INSTALLED WHEN AIR TEMPERATURE IS 50° F OR ABOVE AND RISING.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **WHITE PAINT PAVEMENT MARKING, 4"**

P.C. CONCRETE CURB, TYPE B6.12

CURB & GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE I.D.O.T. STANDARD SPECIFICATIONS. THE CONCRETE CURB & GUTTER SHALL BE TYPE B6.12 UNLESS DETAILED OTHERWISE IN THE CONSTRUCTION PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB. THE CONCRETE SHALL BE CLASS SI. IT SHALL HAVE AN AIR CONTENT OF NOT LESS THAN 5% NOR MORE THAN 7% OF THE VOLUME OF THE CONCRETE. IT SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS. TEST CYLINDERS SHALL BE TAKEN AND THE CERTIFIED COMPRESSION TEST RESULTS SUBMITTED TO THE CITY ENGINEER.

REINFORCING BARS SHALL BE RUN CONTINUOUSLY THROUGH ITS LENGTH, EXCEPT AT EXPANSION JOINTS. AT EACH EXPANSION JOINT PROVIDE TWO 18" LONG No. 6 SMOOTH BARS WITH EXPANSION CAPS AND 3/4" PREMOLDED, NON-EXTRUDING JOINT FILLER. EXPANSION JOINTS ARE TO BE PROVIDED AT ALL RADIUS POINTS, 5' TO 10' EITHER SIDE OF STRUCTURES AND 100' INTERVALS.

CONTRACTION JOINTS SHALL BE SAWED AT A MAXIMUM OF TEN FEET (10') SPACING. THE CONTRACTION JOINTS SHALL BE CUT IN THE UPPER 1/3 OF CURBS AND GUTTERS WITHIN 24 HOURS OF PLACEMENT.

ALL CURB AND GUTTER SHALL BE BROOM FINISHED. FINISHED SURFACES OF ALL NEWLY CONSTRUCTED CURB AND GUTTER SHALL BE COATED WITH ANTI-SPALL AND CURING COMPOUND APPROVED BY THE CITY ENGINEER.

CURING AND PROTECTION OF ALL EXPOSED CONCRETE SURFACES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. NO HONEYCOMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

CURB SPILLOUTS AND CURB GRADING DETAIL SHALL BE INCIDENTAL TO THIS PAY ITEM.

BACKFILLING OF CURBS SHALL BE COMPLETED PRIOR TO PLACEMENT OF ROADWAY BASE-COURSE.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **P.C. CONCRETE CURB & GUTTER, B6.12**.

SIGN PANELS

THIS WORK SHALL CONSIST OF FURNISHING, FABRICATING, AND/OR INSTALLING SIGN PANELS.

ALL SIGNAGE SHALL BE IN ACCORDANCE WITH MUTCD AND IDOT STANDARDS.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER EACH **SIGN**.

METAL POST, TYPE B

THIS WORK SHALL CONSIST OF FURNISHING TYPE B METAL POST AND INSTALLING THEM UTILIZING THE DIRECT BURIAL METHOD. ALL POST SHALL BE IN ACCORDANCE WITH IDOT STANDARDS.

PAYMENT SHALL BE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR **METAL POST, TYPE B**.

SPECIAL EXCAVATION

THIS WORK SHALL CONFORM TO SECTION 202 AND 205 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED 2013 (HERE AFTER CALLED "STANDARD SPECIFICATIONS"), INCLUDING EXCAVATION AND REMOVAL OF EARTH AND EXISTING PAVEMENT INCLUDING SAWCUTTING (BITUMINOUS AND CONCRETE), AGGREGATE BASE, CURB AND GUTTER, SIDEWALK, MEDIANS AND REMOVAL OF VARIOUS SITE ITEMS SUCH AS CULVERTS, FENCES, GUARD RAILS, ROCKS, OR TIMBER RETAINING WALLS AND GRADING TO DESIGN ELEVATIONS AS DESIGNATED ON THE DRAWINGS.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR **SPECIAL EXCAVATION.**

STORM SEWER, ADS N-12

STORM SEWERS UNDER THIS ITEM SHALL BE ADS N-12 SEWER PIPE, MATERIALS SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATIONS M252 (3"-10").

THIS ITEM INCLUDE SEWER PIPE, GRANULAR PIPE BEDDING, GRANULAR BACKFILL, PLUGS, JOINT MATERIALS, AND ANY OTHER INCIDENTAL COSTS NOT SPECIFICALLY INCLUDED FOR PAYMENT UNDER OTHER ITEMS.

ALL PIPE AND JOINTS SHALL BE TESTED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH THE MOST RECENT CITED STANDARD METHODS OF AASHTO OR ASTM AT THE CONTRACTOR'S EXPENSE. TWO COPIES OF EACH TEST CERTIFICATE SHALL BE PROMPTLY FURNISHED TO THE ENGINEER.

WHERE UNSUITABLE SOIL IS ENCOUNTERED, FOUNDATION MATERIAL UNDER PIPE BEDDING OF 6" WELL GRADED, DURABLE GRAVEL, CRUSHED STONE, OR SLAG WILL BE REQUIRED. TRENCH BACKFILL TO THE SUBGRADE ELEVATION ABOVE THE TOP OF THE PIPE WILL BE REQUIRED ON PIPE UNDER ROADWAY AREAS. THESE ITEMS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR **STORM SEWER, ADS N-12**, OF THE DIAMETER SPECIFIED.

STORMTECH SC-310 CHAMBERS

THIS WORK SHALL INCLUDE ALL WORK REQUIRED TO INSTALL THE CHAMBERS INCLUDING THE NON-WOVEN GEOTEXTILE, AGGREGATE BASE AND FILL. WORK AND INSTALLATION SHALL CONFORM TO THE MANUFACTURERS SPECIFICATIONS AND DETAILS.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER UNIT FOR **STORMTECH SC-310 CHAMBERS.**

STORM MANHOLE, TYPE B

THE CONTRACTOR SHALL FURNISH AND INSTALL MANHOLES AT LOCATION AND GRADE SHOWN ON THE CONSTRUCTION DRAWINGS IN ACCORDANCE WITH ST. CHARLES ENGINEERING DESIGN & INSPECTION MANUAL AND THE DETAILS IN THE PLANS. NO MORE THAN 12" OF ADJUSTING RINGS SHALL BE ALLOWED PRIOR TO PLACEMENT OF THE MANHOLE COVER OR FRAME AND GRATE. THE FLAT SLAB AND TYPE 1 FRAME W/ CLOSED LID SHALL BE INCIDENTAL TO THE STORM HAMNOLE, TYPE A.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER EACH **STORM MANHOLE, TYPE B**.

R-3250 CURB INLET

THE CONTRACTOR SHALL FURNISH AND INSTALL INLETS AND CASTINGS AT THE LOCATIONS AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS IN ACCORDANCE WITH ST. CHARLES ENGINEERING DESIGN & INSPECTION MANUAL AND THE DETAILS IN THE PLANS.

THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER EACH FOR **R-3250 CURB INLET**.

RAIN GARDEN

THIS WORK SHALL CONSIST OF ALL MATERIALS REQUIRED TO COMPLETE CONSTRUCTION OF THE BIOINFILTRATION AREA INCLUDING WORK SHALL CONFORM TO SECTIONS 202, 254, 280, 281 & 1004 OF THE STANDARD SPECIFICATIONS.

TEMPORARY COVER SHALL CONSISTS OF EROSION CONTROL MATERIALS THAT PROVIDE SHORT-TERM PROTECTION OF DISTURBED SOIL AREAS. THEY SHALL BE COMPOSED OF BIODEGRADABLE MATERIALS WITH VARIABLE LONGEVITY.

WORK TO BE PERFORMED DURING THE FIRST YEAR OF THE PLANT ESTABLISHMENT PERIOD SHALL BE DONE BY THE CONTRACTOR AND INCLUDE THE FOLLOWING:

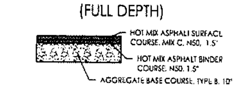
1. WEED CONTROL AND REMOVAL OF INAPPROPRIATE PLANT SPECIES.
2. MOWING AND OTHER VEGETATION MANAGEMENT.
3. REPAIR OF RILLS, GULLIES, AND OTHER DAMAGE CAUSED BY EROSION AND SCOUR.
4. RESEEDING OR PLANTING OF BARE OR REPAIRED AREAS.
5. REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS.
6. ADDITIONAL PLANTING.
7. ADDITIONAL IRRIGATION, AND
8. MONITORING OF PLANT GROWTH AND ESTABLISHMENT.

NEAR 100% COVERAGE SHOULD BE POSSIBLE AFTER THE SECOND GROWING SEASON.

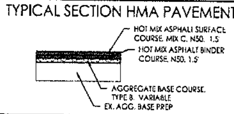
PLANT BULBS SHALL BE PLANTED AT THE LOCATIONS AS DIRECTED BY THE OWNER.

THIS WORK SHALL BE PAID FOR AT THE UNIT PRICE BID PER SQUARE FOOT FOR **RAIN GARDEN**.

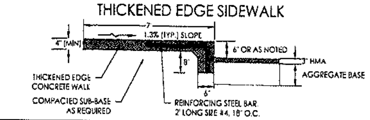
TYPICAL SECTION HMA PAVEMENT (FULL DEPTH)



TYPICAL SECTION HMA PAVEMENT



TYPICAL SECTION THICKENED EDGE SIDEWALK



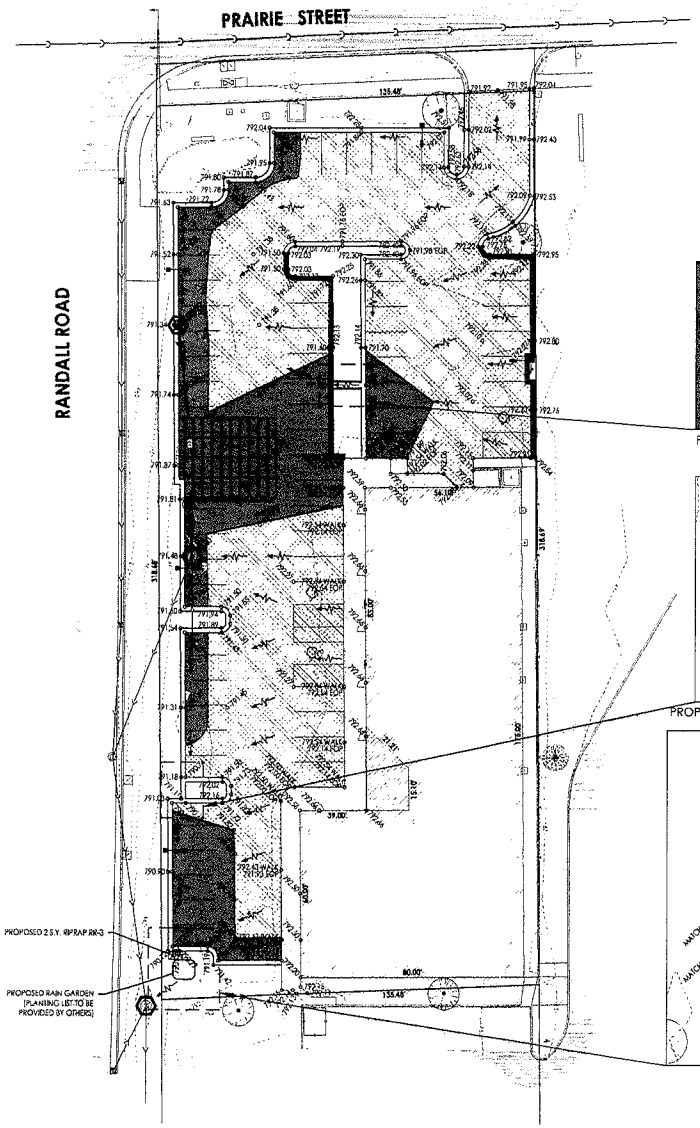
700 WEST LOCUST ST., BELVIDERE, IL 61008
(815)-547-8435 FAX:(815)-544-0421
ILLINOIS DESIGN FIRM NO. 184-001260

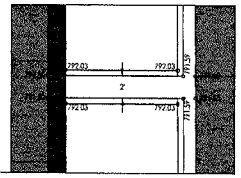
Date	Revision	By
7/8/14	REVISIONS PER CITY (LETTER DATED 7/3/2014)	JAB

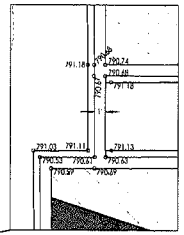
600-660 S. Randall Road
Overall Site Plan

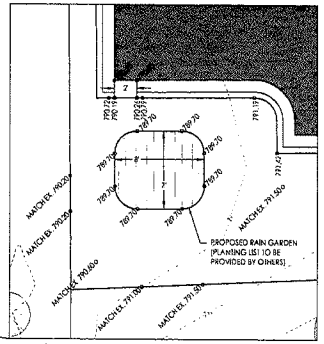
CHECKED BY: KCB DATE: 06/30/14 | DRAWN BY: JAB DATE: 06/30/14

3602_BASE.dwg









CONTACT:

J.U.L.I.E.

DIAL: 811

PRIOR TO ANY CONSTRUCTION

PAVEMENT LEGEND

- EX. HMA PAVEMENT
- EX. CONCRETE PAVEMENT/SIDEWALK
- EX. LANDSCAPED AREA
- PROPOSED HMA PAVEMENT (FULL DEPTH)
- PROPOSED HMA PAVEMENT (AGG. BASE PREP., AGG BASE VARIABLE & HMA)
- PROPOSED THICKENED EDGE CONCRETE SIDEWALK

PRO 600-660 RANDALL ROAD ST. CHARLES

Stormwater Detention Pond Calcs

Existing Impervious Area = 34907 S.F.
Proposed Impervious Area = 37067 S.F.

"C" Factor Calcs

TYPE	TOTAL SF	"C"	C * A
ADDITIONAL IMPERVIOUS AREA	2160		
BUILDING/PAVED AREA	2500	0.90	2241
GREEN AREA	0	0.15	0
			2241

WEIGHTED C = 0.85

Q ALLOWABLE CALCULATION

A= 0.058 Ac.
C1 = 0.100 (5/YEAR)
Q100 = C1A = 0.007 c.f.s.

DETENTION POND SIZING

DURATION (HOURS)	INTENSITY (INCHES)	C X A	INFLOW (CFS)	RELEASE ALLOWABLE (CFS)	STORAGE RATE (CFS)	REQ'D STORAGE (AC.FT.)
0.083	9.85	0.062	0.6	0.007	0.59	0
0.167	10.57	0.062	0.65	0.007	0.64	0.006
0.333	7.98	0.062	0.49	0.007	0.48	0.012
0.500	6.05	0.062	0.37	0.007	0.36	0.015
0.583	5.52	0.062	0.34	0.007	0.33	0.015
0.833	4.46	0.062	0.28	0.007	0.27	0.017
1.000	3.94	0.062	0.24	0.007	0.23	0.019
1.500	2.98	0.062	0.18	0.007	0.18	0.023
2.000	2.34	0.062	0.14	0.007	0.14	0.023
3.000	1.66	0.062	0.10	0.007	0.10	0.024
4.000	1.31	0.062	0.08	0.007	0.08	0.024
5.000	1.12	0.062	0.07	0.007	0.06	0.027
6.000	0.97	0.062	0.06	0.007	0.06	0.028
7.000	0.85	0.062	0.05	0.007	0.05	0.028
24.000	0.307	0.062	0.02	0.007	0.01	0.025
				MAX =		0.028 AC. FT.
						1224 CU. FT.

ORIFICE CALCULATIONS

Q = CA. 2GH
H (FT) 1.35
Q ALLOWABLE (CFS) 0.007
C (K-CONSTANT) 0.600
G (GRAVITY FT/SEC) 32.20
A = ORIFICE AREA (SQ.FT) 0.001
ROUND ORIFICE DIA. (IN) 0.425 USE 3" ORIFICE

DETENTION VOLUME IN STORM TECH MC-750 CHAMBERS

31.0 CU. FT. PER CHAMBER
1224/31 = 39 TOTAL CHAMBERS REQUIRED
40 TOTAL CHAMBERS PROVIDED 1240 CU. FT. PROVIDED

DETENTION REQUIRED = 0.37"/12IN PER FT* 2060 S.F. = 637 C.F.
DETENTION PROVIDED = 40*31.0 C.F. PER UNIT = 1240 C.F.

EXISTING 18" PIPE @ 0.4% RELEASE 3.36 CFS (DOES NOT INCLUDE WATER DRAINING TO THE EAST)
PROPOSED 3" ORIFICE WILL RELEASE 0.33 CFS (WATER NO LONGER DRAINING TO THE EAST)

EROSION AND SEDIMENT CONTROL NOTES:

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, LATEST REVISION.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE CITY OF ST. CHARLES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING PUBLIC & DEVELOPMENT STREETS WHEN DEBRIS HAS BEEN TRACKED AND OR WASHED ON THEM. THE CONTRACTOR SHALL BE RESPONSIBLE TO SWEEP THE STREETS IF DIRECTED TO DO SO BY THE CITY OF ST. CHARLES. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONTROL DUST ON THE SITE IN ACCORDANCE WITH PRACTICES IN THE ILLINOIS URBAN MANUAL.

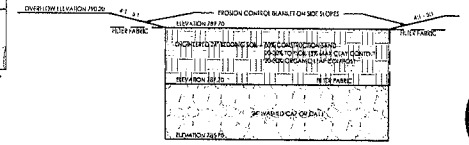
ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AND STABILIZED PRIOR TO SITE CLEARING AND GRADING. ALL EROSION AND SEDIMENT CONTROL PRACTICLS WILL BE MAINTAINED THROUGH THE DURATION OF THE PROJECT. ALL EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAINFALL EVENT AND 6" SNOWFALL EVENT AND AN INSPECTION RECORD SHALL BE MAINTAINED BY THE CONTRACTOR AT THE JOB SITE FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM THESE INSPECTIONS AND TO MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES IN SUCH A MANNER THAT THEY CONTINUE TO FUNCTION FOR THE DURATION OF THEIR INTENDED USE. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM ALL TEMPORARY SEEDING.

ALL DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY SEEDING WITHIN 14 DAYS FOLLOWING THE END OF ACTIVE DISTURBANCE.

EROSION BLANKETS ARE TO BE INSTALLED ON ALL SLOPES STEEPER THAN 10%. EROSION BLANKETS WILL NOT BE REQUIRED IF SOD IS USED. IMMEDIATELY AFTER TOPSOILING, FERTILIZING, AND SEEDING ARE COMPLETE. INSTALLATION OF EROSION BLANKETS SHALL BE ACCORDING TO THE RECOMMENDATIONS OF THE MANUFACTURER. EROSION BLANKETS SHALL BE INSPECTED PERIODICALLY AND AFTER EACH RAINFALL FOR DAMAGE OR DISPLACEMENT. DAMAGED OR DISPLACED EROSION BLANKETS SHALL BE REPAIRED OR RESTAPLED AS SOON AS POSSIBLE. TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED VIA PERMANENT MEASURES. PERMANENT VEGETATION AND STRUCTURES SHALL BE INSTALLED AND FUNCTIONAL AS SOON AS PRACTICAL DURING DEVELOPMENT. PERMANENT SEEDING, SODDING, OR LANDSCAPING SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL TOPSOIL (6"-SPREAD).

ALL STOCKPILES ARE TO BE PLACED AT A LOCATION SPECIFIED BY THE ENGINEER. ALL STOCKPILES ARE TO BE PROTECTED BY SILT FENCE ALONG THE DOWN SLOPE SIDES OF THE STOCKPILE OR AROUND THE ENTIRE PERIMETER IF DIRECTED TO DO SO BY THE ENGINEER, THE CITY OF ST. CHARLES, OR THEIR REPRESENTATIVES. ANY STOCKPILES THAT WILL REMAIN UNDISTURBED FOR LONGER THAN THREE WEEKS SHALL BE PROTECTED BY TEMPORARY SEEDING. SOIL STORAGE PILES CONTAINING MORE THAN 10 CUBIC YARDS OF MATERIAL SHALL NOT BE LOCATED WITH A DOWN SLOPE DRAINAGE LENGTH OF LESS THAN 25 FEET TO A ROAD WAY OR DRAINAGE CHANNEL. COST OF TEMPORARY SEEDING SHALL BE INCLUDED PRICE BID PER EROSION CONTROL LUMP SUM.

EROSION FABRIC IS NECESSARY FOR SILT TRAPS INSTALLED AT ALL STORM STRUCTURES WITH OPEN TOPS. ALL STORMWATER INLETS SHALL BE PROTECTED BY SILT TRAPS. EXCELSIOR LOGS, EROSION FABRIC, OR OTHER METHODS APPROVED BY THE CITY OF ST. CHARLES. AFTER EACH RAINFALL EACH INLET SHALL BE INSPECTED. ANY INLET PROTECTION THAT HAS FAILED OR IS DAMAGED SHALL BE REPAIRED AS SOON AS POSSIBLE. SEDIMENT SHALL BE REMOVED AS NECESSARY TO PROVIDE FOR THE CONTINUED EFFECTIVENESS OF THE INLET PROTECTION TECHNIQUE IN USE.



RAIN GARDEN DETAIL

INLET PROTECTION (VARIES BY INLET TYPE)

— SF — SF — SILT FENCE

4" TOPSOIL MIN., CLASS IA SEEDING & MULCH METHOD 2

CES
CIVIL ENGINEERING SERVICES, INC.
200 WEST COUGHT ST., BELVIDERE, IL 61008
(815) 547-4405 FAX (815) 544-0481
ILLINOIS DESIGN FIRM NO. 184-001760

DATE	REVISION	BY
7/8/14	REVISIONS PER CITY REVIEW DATED 7/3/2014	JAB

600-660 S. Randall Road
Grading & Storm Water Pollution Prevention Plan

CHECKED BY: KCB
3602_06-20114
DRAWN BY: JAB
DATE: 06/20114
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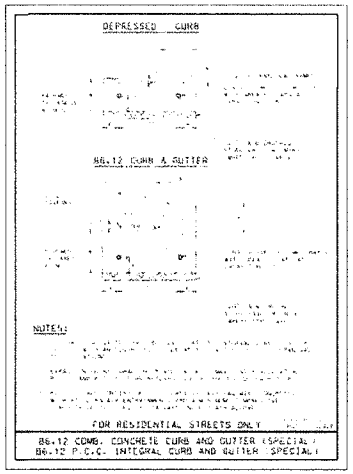
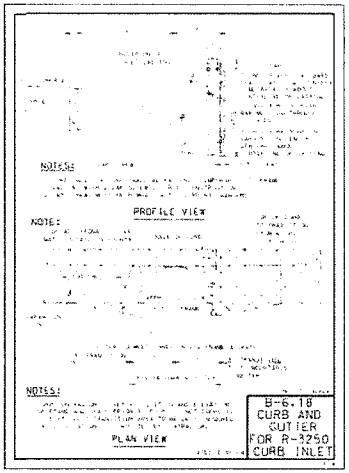
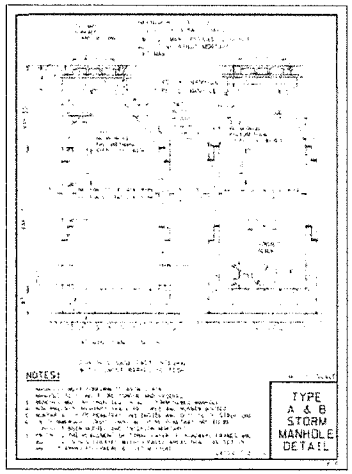
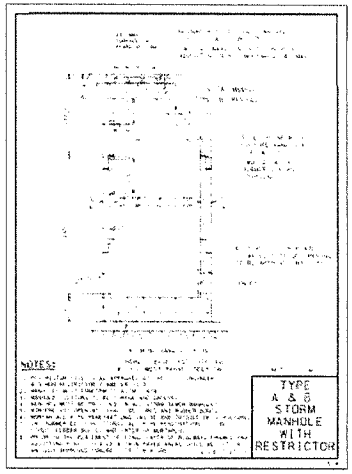
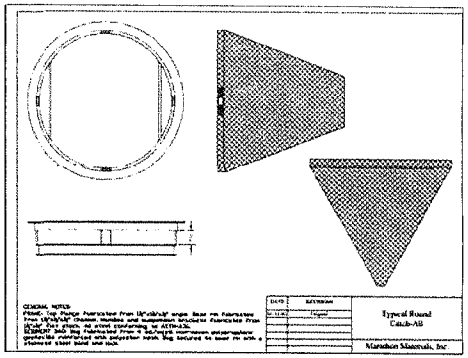
Sheet 4 of 5

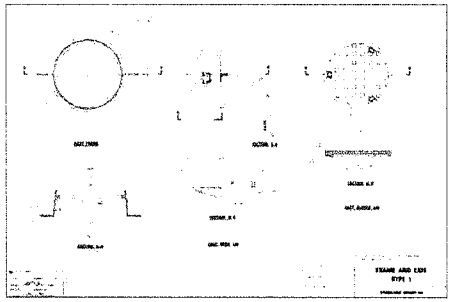


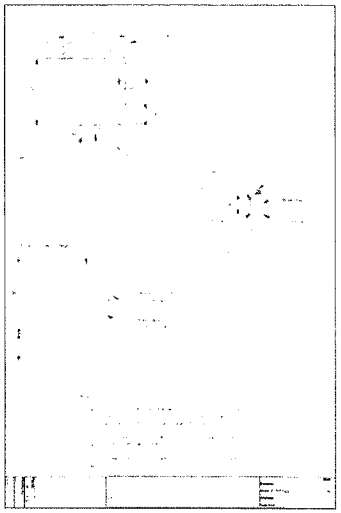


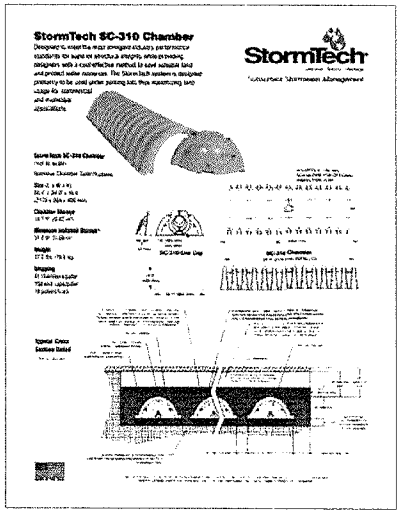


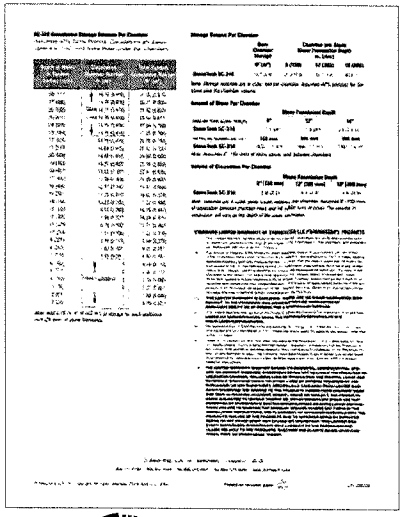


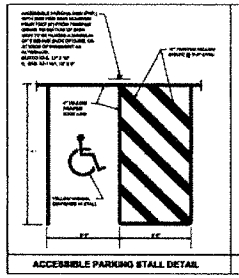






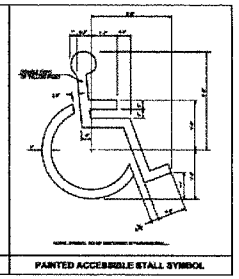






ACCESSIBLE PARKING STALL DETAIL

ACCESSIBLE PARKING SIGN



PAINTED ACCESSIBLE STALL SYMBOL

CES INC.

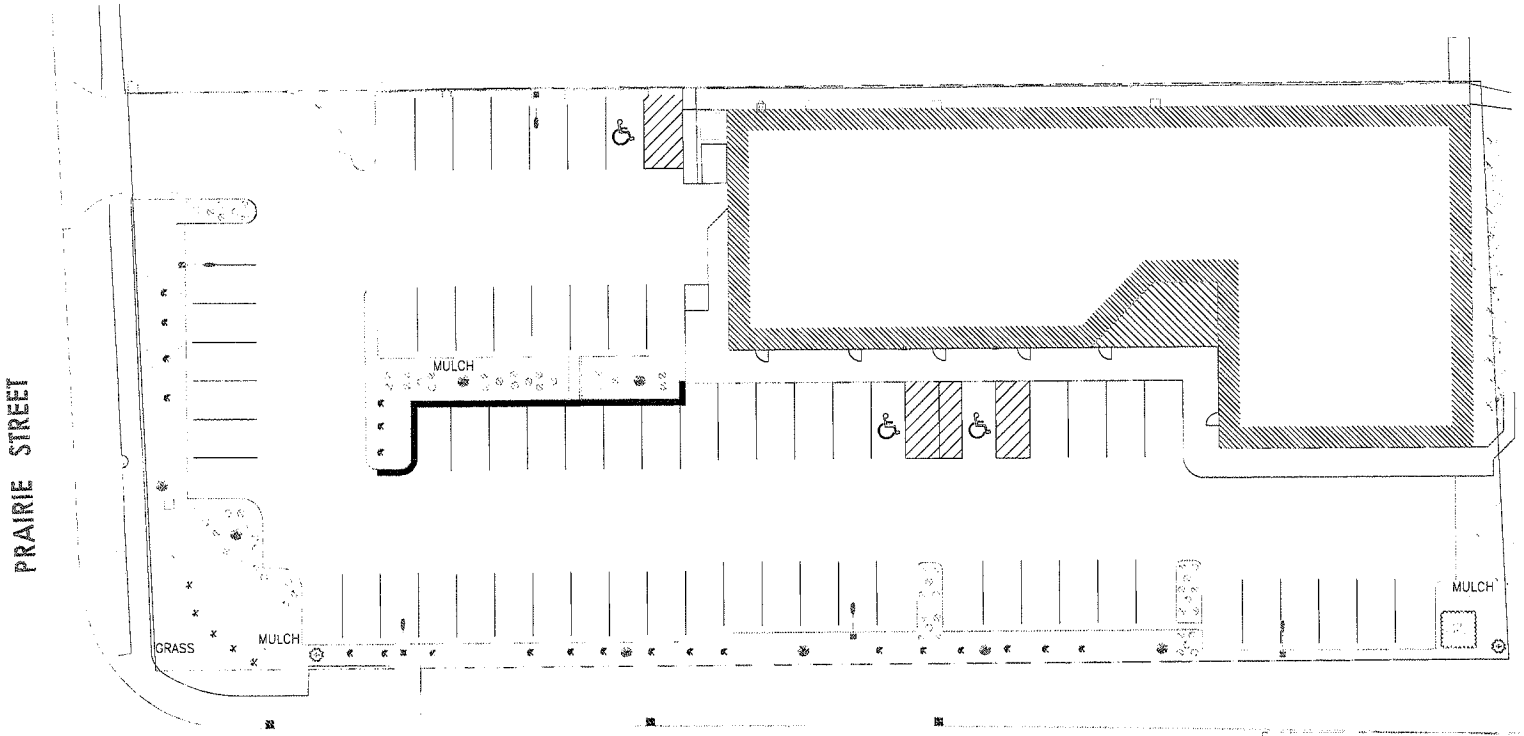
Date	Revision	By
7/8/14	REVISIONS PER CITY LETTER DATED 7/3/2014	JAB

600-660 S. Randall Road
Details

700 WEST LINCOLN ST., BARTLETT, IL 60103
(815) 547-6425 FAX (815) 544-0421
ILLINOIS DESIGN FIRM NO. 184-001160

CHECKED BY: KCB
DATE: 06/30/14
DRAWN BY: JAB
DATE: 06/30/14
3602_BASE.dwg

Sheet
5 of 5



LANDSCAPE PLAN

PLANT LIST

KEY	BOTANNICAL NAME / COMMON NAME	QUANTITY	SIZE
	BLACKAHAW VIBURNUM	22	30"
	TINA CRABAPPLE	10	2"
	KARL FOERSTER GRASSES	20	1 GAL.
	CHICAGO FIRE BURNING BUSH	37	30"
	NEARLY WILD ROSES	30	18"
	GOLD MOUND, SPIREA	73	24
	BARBERRY	5	6"
	PYRUS CALLERYANA, AUTUMN BLAZE	2	2"
RAIN GARDEN	YELLOW CONEFLOWER AND BLUE JOINT GRASS		

Received 7/18/14

RECEIVED
St. Charles, IL

MAY 2 2 2014

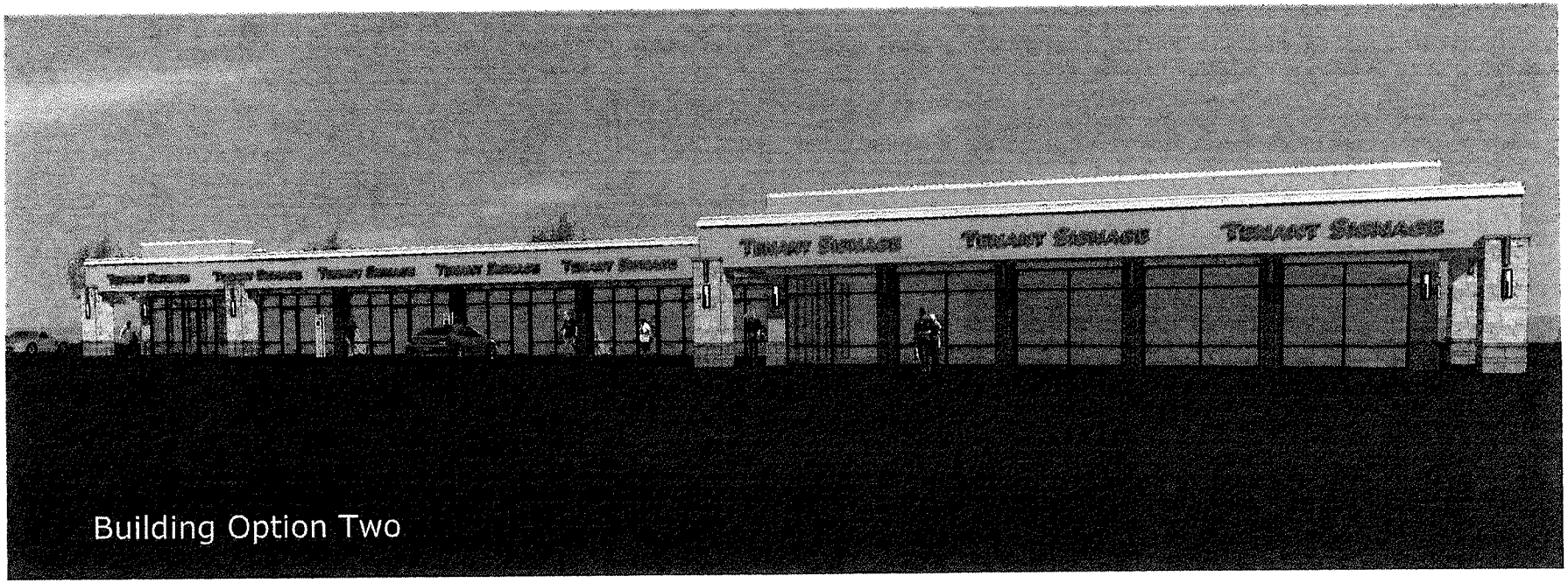
CDD
Planning Division

McClellan Blakemore
Architects

New Office/Retail Building

Randall Shoppes - St. Charles, Illinois

date: 2/10/14



RECEIVED
St. Charles, IL
MAY 2 2 2014
CDD
Planning Division

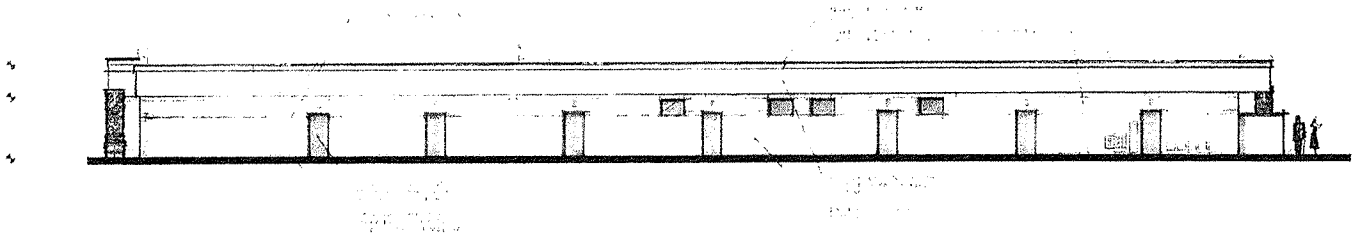
Conceptual Rendering

New Office/Retail Building

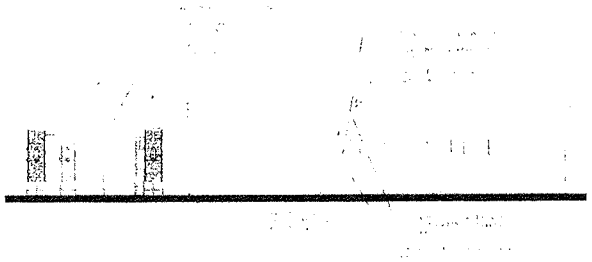
Randall Shoppes - St. Charles, Illinois

date: 2/10/14

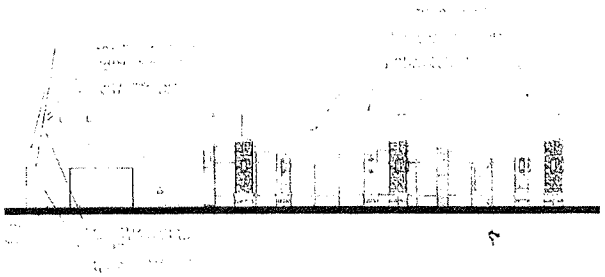
4



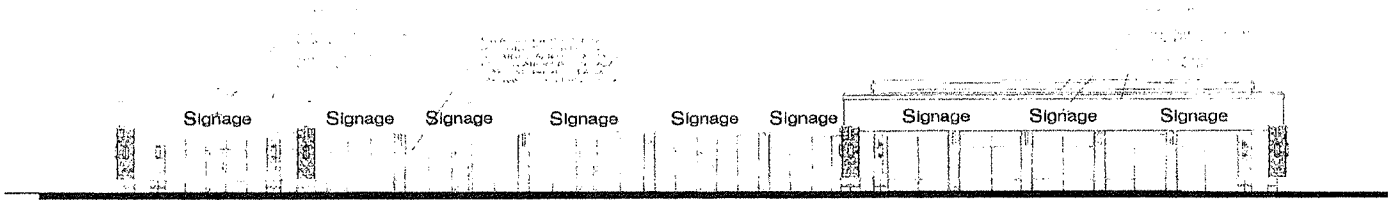
East Elevation
1/8" = 1'-0"



South Elevation
1/8" = 1'-0"



North Elevation
1/8" = 1'-0"



West Elevation
1/8" = 1'-0"

McClellan Blakemore
Architects
400 North First Street
Rockford, Illinois 61107
T 815-227-0023
F 815-227-0024
Web www.m-b-arch.com

First Group
8801 Spring Creek Road
Rockford, Illinois 61114

Existing
Retail Building
Remodeling
to
Randall Shoppes

600-660 Randall Road
St. Charles, Illinois

THE CONTRACTOR SHALL DETERMINE EXACT DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS WITH ACTUAL FIELD CONDITIONS PRIOR TO PROCEEDING WITH THE WORK AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. THIS DRAWING IS THE PROPERTY OF McCLELLAN BLAKEMORE ARCHITECTS AND MAY NOT BE REPRODUCED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE ARCHITECT.

NO	DATE	DESCRIPTION
1)	5-15-14	Building Improvements

(c) Copyright McClellan Blakemore Architects Inc.

Project No. 1406

Scale 1/8" =1'-0"

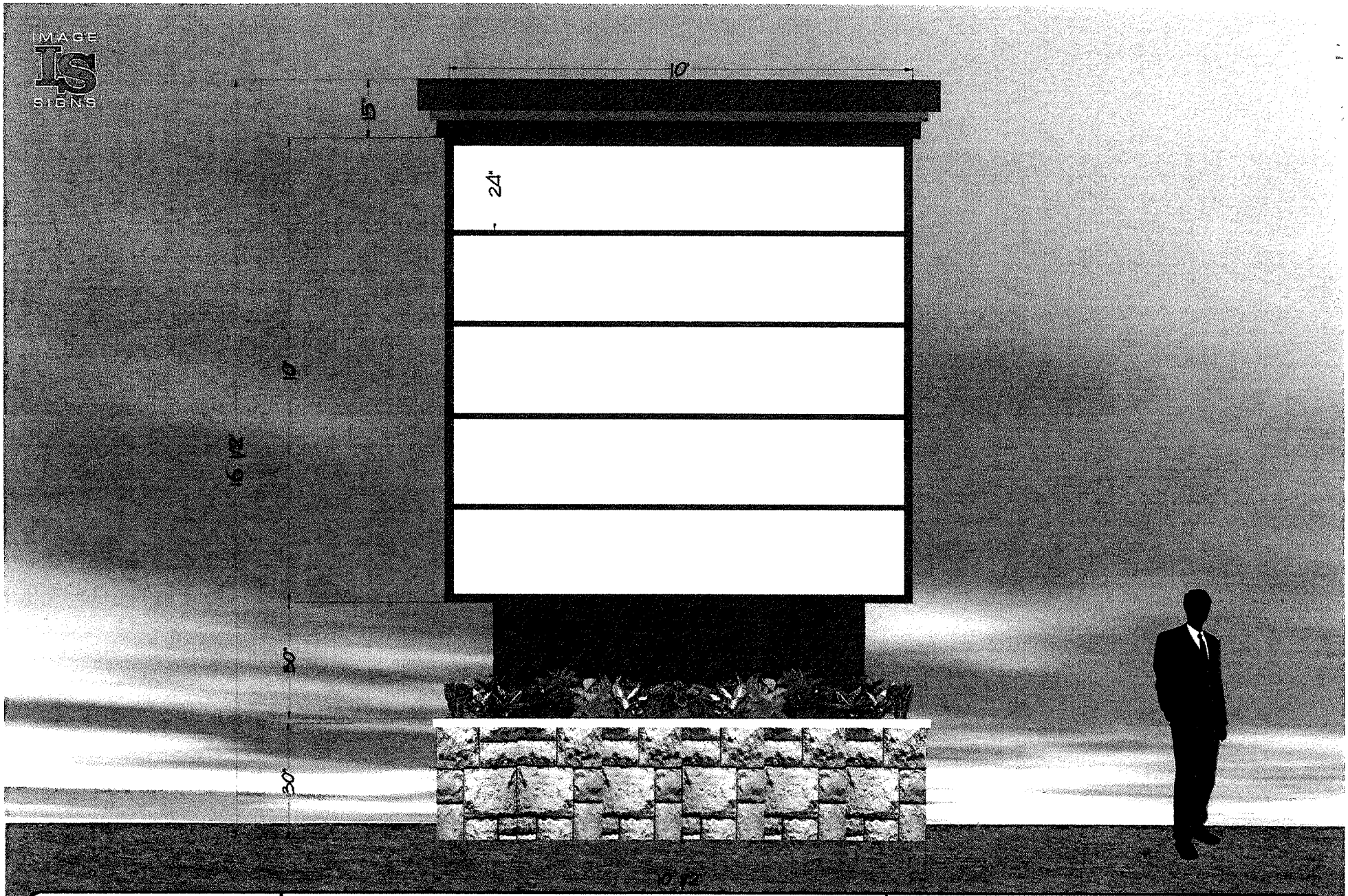
Sheet Title ELEVATIONS

Ref. North

Sheet No. A201

PRELIMINARY

RECEIVED
St. Charles, IL
MAY 2 2 2014



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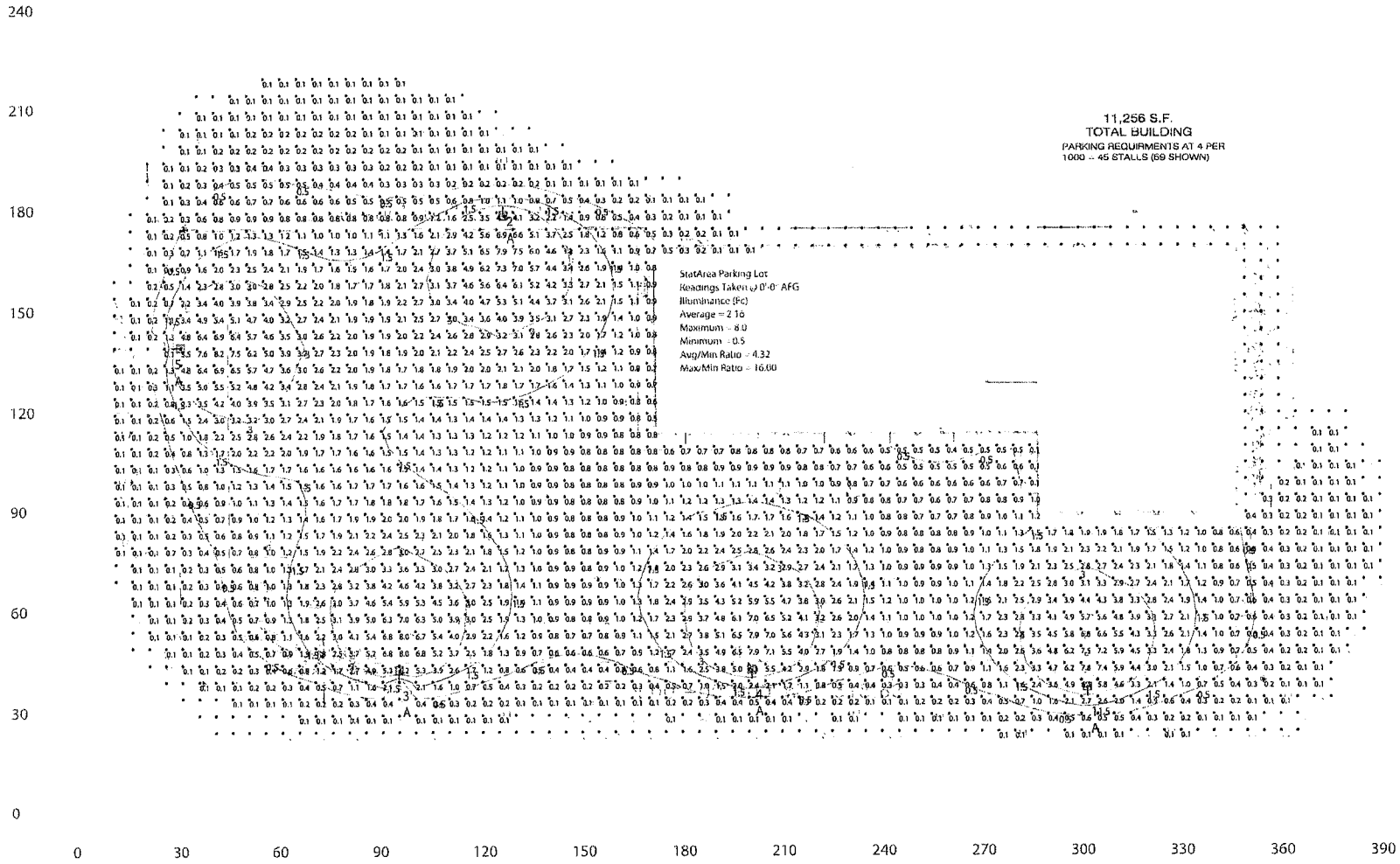
Company First Rockford Group Date 03/05/14

Notes St. Charles Monument

Approval

IMAGE IS SIGNS

ROCKFORD
PH: 282-4141
FAX: 282-4157



Scale: 1 inch= 30 Ft.

RAB LIGHTING

Tel: (888) 722-1000 Fax: (888) 722-1232
WWW.RABWEB.COM

Prepared For:
Agents Midwest Ltd.
775 Mittel Drive
Wood Dale, IL 60191
Tel: 630-616-8900
Fax: 630-616-8909

Job Name:
St Charles Parking
600 S. Randall Road
St. Charles, IL 60174
Lighting Layout
Version A

Scale: as noted

Date:6/10/2014

Drawn By: BEL

Filename: C:\Users\brittany.lynch\Desktop\St Charles Parking\AGI files\St Charles Parking Layout 061014A.AGI

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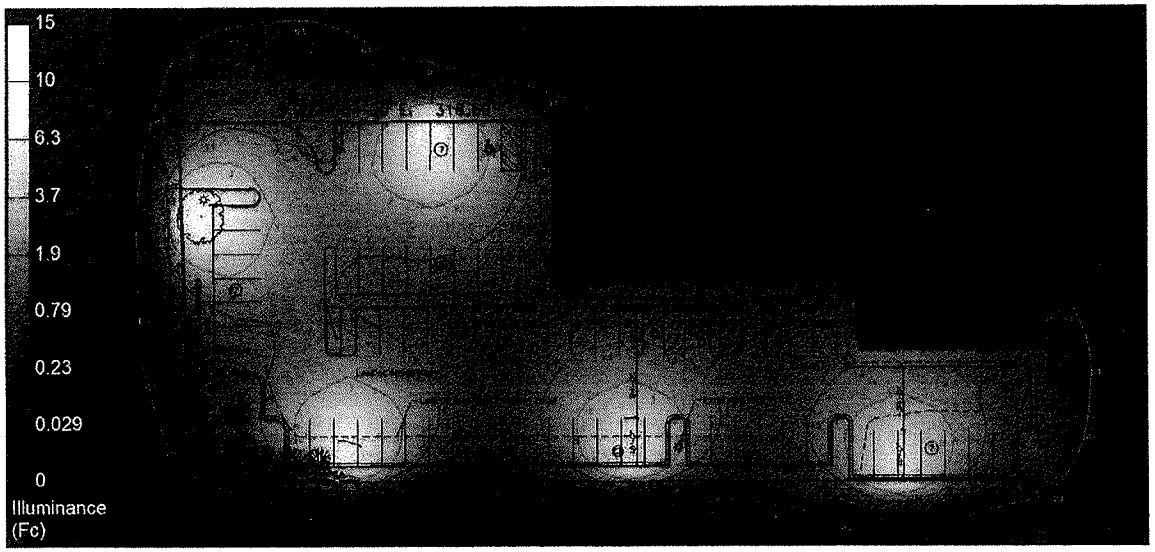
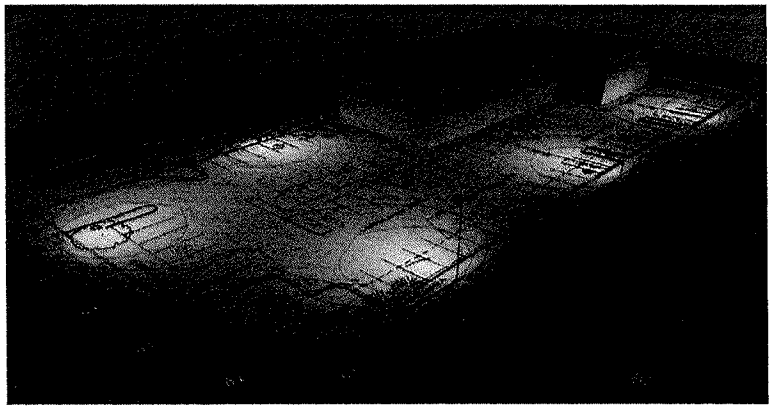


Top View



Iso View

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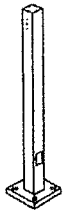
Calculation Summary											
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description	PtSpcLr	PtSpcTb	Meter Type
CalcPts Ground Plane	Illuminance	Fc	1.33	8.2	0.0	N.A.	N.A.	Readings Taken @ 0'-0" AFG	5	5	Horizontal
StatArea Parking Lot	Illuminance	Fc	2.16	8.0	0.5	4.32	16.00	Readings Taken @ 0'-0" AFG			

Luminaire Schedule										
Symbol	Tag	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Lum. Watts	Arr. Watts	Total Watts
	A	5	ALED4T150	SINGLE	14349	1.000	LED Area Light Type IV 150W Cool	155.7	155.7	778.5

Expanded Luminaire Location Summary							
LumNo	Tag	Label	X	Y	Z	Orient	Tilt
1	A	ALED4T150	308	38.5	25	90	0
2	A	ALED4T150	133	182.5	25	270	0
3	A	ALED4T150	101	44	25	90	0
4	A	ALED4T150	207	44	25	90	0
5	A	ALED4T150	34.5	142	25	0	0
Total Quantity: 5							

A : ALED4T150



PS4-11-25D2

QTY : 5

NOTES:

* The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLD is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting Inc.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* RAB Lighting Inc luminaire and product designs are protected under U.S. and International Intellectual property laws. Patents issued or pending apply.

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State of Illinois)
) **ss.**
Counties of Kane and DuPage)

Certificate

I, NANCY GARRISON, certify that I am the duly elected and acting Municipal City Clerk of the City of St. Charles, Kane and DuPage Counties, Illinois.

I further certify that on July 21, 2014, the Corporate Authorities of such municipality passed and approved Ordinance No. 2014-Z-16, entitled

"An Ordinance Granting Approval of Special Use for Planned Unite Development and PUD Preliminary Plan (600-660 S. Randall Road – Randall Shoppes),"

which provided by its terms that it should be published in pamphlet form.

The pamphlet form of Ordinance No. 2014-Z-16, including the Ordinance and a cover sheet thereof was prepared, and a copy of such Ordinance was posted in the municipal building, commencing on July 25, 2014, and continuing for at least ten days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the municipal clerk.

DATED at St. Charles, Illinois, this 21st day of July, 2014.

Nancy Garrison
Municipal Clerk

(S E A L)