## Attachment E

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## Subject: FW: Meeting regarding TIA ordinance changes

Mayor, thank you very much for letting me know about the proposed TIA changes. I have reviewed the TIA proposal and had a few comments. I also contacted Randy Goddard (DRG) since he is an expert in the field and I have incorporated a few of his comments below:

My comments:

1. Threshold Requirement: 14.2.1
a. Huntersville requires a TIA if 50 peak or 500 daily. Other towns/NCDOT have a higher threshold. I suggest a compromise - say if it's over 50/500 but under 100/1000, no TIA required unless the development is anticipated to adversely impact intersections within the Town.
b. What about adding a provision that a development that produces slightly higher than the threshold can get a waiver with certain parameters? Like waiver included in 14.3 for Impact Area.
2. Impact Area: 14.3
a. I checked with Randy Goddard about what he sees as a reasonable threshold and he thought the new request for 20 vehicles added to an approach or 40 to the entire intersection is too tight of a parameter. He said adding 20 to an approach is like saying if you have a left, through and right turn lane and the project is estimated to add 7 vehicles to each of those movements (total 21 cars by approach) the intersection must be analyzed.
b. Why not use 50 by approach or 100 through the entire intersection as the trigger?
c. It seems like the signalized intersections and unsignalized should have different parameters. Randy thought so, too. If an intersection is a major one, it would be signalized.
d. Note that tying to a signalized intersection to create the 4th leg should trigger analysis.
e. Flexibility to include the waiver is a good idea, but not sure if the parameters listed are descriptive enough.

## 3. Mitigation: 14.4.2

a. Maybe allow the greater of the adopted standard in 14.4.1 or within $3 \%$ of the no - build ICU to provide greater flexibility?
b. Both mitigation options - surplus and funding other improvements - are a good idea. If goals are to provide more common sense flexibility, resolve major traffic issues caused by development, be competitive with other towns and prevent "first to play has to pay," what about a cost sharing program so that major improvements can be accomplished and subsequent developers have to pay their share of major improvements? I can look at other towns to find out if this is done in other locations, but it seems like the funding option - with each developer putting in funds as projects are approved - might effectively accomplish this. Since it is an optional payment in lieu, it doesn't seem like it would be considered an impact fee.
c. Also, instead of saying funded transportation improvements shall be completed in 3 years, maybe provide a little more flexibility - assuming these are built by Town with developer money (what if it's an NCDOT road?). Maybe they have to be scheduled to be completed within 3 years and then some drop dead date if not started in 5? In my markup, I was thinking it would have to go back to the developer, but a better solution might be that after 3 years, the funds could be transferred to build another intersection that has more funding and is closer to a build date.

My markup is attached with the above comments. Thanks,

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# AKIICLE 14: Irainic Impact Analysis (TIA) 

### 14.1 Overview

A Traffic Impact Analysis is utilized by the Town to evaluate the incremental impact of a development on the surrounding transportation system. A TIA required by this Article will be prepared by a qualified traffic engineering consultant retained by the Applicant and reviewed and approved by the Town. The adequacy of service levels for local and state road intersections that serve or are affected by a proposed project shall be determined in accordance with the provisions of this Article.

### 14.2 Applicability

14.2.1 Generally
a. A TIA is required for any development, or portion thereof, which is expected to create fifty $(50)$ Por more peak hour vehicle trips or 50 er more daily vehicle trips except as provided in subsections (c) through (g) below. Daily trips are those occurring on peak days on the roadway adjacent to the proposed development, based on the current edition of the ITE (Institute of Transportation Engineers) Trip Generation Manual, with the exception of the public and private schools which will be based on the North Carolina Department of Transportation's (NCDOT) most recent MSTA School Traffic Calculator. Alternative trip generation rates/equations for non-standard uses may be utilized subject to Town Engineering staff approval.
b. The determination of the number of trips generated also shall take into account pass-by trips, internal trip capture for integrated mixed use projects (e.g., roadway and/or pedestrian connectivity) and any proposed transportation demand management system where adequate guarantees are provided by the applicant to the Town, which ensure the proposed demand ' management system will function as proposed for the life of the project. In addition, if the proposed development is designed and integrated with an adjacent mixed use project, a credit for trips may be permitted.
c. For redevelopment projects, including changes of use, trip generation thresholds shall be defined as the number of net new trips anticipated to be generated by the proposed development over and above the number of trips generated by the current use of the site.
d. Where a development is expected to generate less than 50 peak hour trips, but is anticipated to adversely impact intersections within the Town, a TIA may be required as determined by the Town Engineer. Can we also have a reciprocal provision that a dovelopment that produces 100 or more but less. Than 150 ean get a, wawer with ceitain parameters $\rightarrow$ hile wawer10/19/16 proposed un 14.3 Impact Area
e. No TIA shall be required for special events, which either are temporary in nature, consistent with the Town Zoning Ordinance, or which generate trips that meet or exceed the thresholds set forth in (a), but which do not occur during the peak hours of the roadways adjacent to the proposed development.
f. A "Determination of Need" for a TIA shall be made by the Town in accordance with the trip generation standards set forth in this section. (See the Town of Huntersville TIA Process and Procedures Manual for additional information).
g. Nothing herein shall prohibit the Town from requiring on-site or off-site improvements necessary to address traffic safety concerns created by a proposed development, regardless of whether the thresholds set forth above have been met.
h. The provisions of this Article shall not be interpreted or deemed to affect any rights that have vested prior to the effective date of this Article, nor shall any provision of this Article be applied to a specific property or applicant in a manner that would result in a taking of property.
i. The provisions of this Article shall not apply to any development proposal that was part of a conditional zoning plan or subdivision plan submitted prior to the effective date of this Article.

### 14.2.2 Consecutive or Sequential Applications.

Proposed developments may not be phased or subdivided in piecemeal fashion to avoid application of this Article. Two or more developments represented to be separate developments shall be aggregated and treated as a single development under this Article if the Administrator determines them to be part of a unified plan of development and physically proximate to one another, based on the following factors:
a. There is unified ownership, indicated by the fact that:

1) The same person has retained or shared control of the developments;
2) The same person has ownership or a significant legal or equitable interest in the developments; or
3) There is common management of the developments controlling the form of physical development or disposition of parcels of the development.
b. There is a reasonable closeness in time between the completion of 80 percent or less of one development and the submission to the Town of a development proposal for a subsequent development that is indicative of a common development effort.
c. The voluntary sharing of infrastructure that is indicative of a common development effort or is designated specifically to accommodate the developments.
d. There is a common advertising scheme or promotional plan in effect for the developments.
e. Any information provided by the applicant that the project is not being phased or subdivided to avoid the requirements of this Article.

### 14.2.3 TIA Submission \& Completion Requirement

Once the Town has made a Determination of Need for a TIA, the applicant may proceed with the TIA study, in accordance with the terms of the most recent version of the Town of Huntersville TIA Process and Procedures Manual, as approved by the Town Engineer and all applicable Zoning Ordinance and Subdivision Ordinance requirements. The draft TIA shall be submitted to the Town Staff 30 days prior to either the Town Board Public Hearing (for rezoning cases) or the Planning Board meeting (subdivisions). Resubmittals of TIAs are to be received a minimum of 20 business days prior to the scheduled Town Board final action. The final sealed TIA shall be completed and found to meet the criteria of Article 14 and the TIA Process and Procedures Manual by Town staff prior to final action by the Town Board or permit issuing authority.

### 14.3 Impact Area

The impact study area designates the intersections for study where potential increases in traffic from the development may require mitigation. Where traffic from the proposed development is anticipated to increase a signalized or major thsigralizet intersection single approach by 38 vehicles in a peak hour or the total of all approaches by vehicles in a peak hour would require the intersection to be studied in the TIA. Should an intersection be considered at its ultimate buildouf laneage or configuration, the Town Engineer may waive the requirement to include the intersection for study in the TIA. - If a developer io asking to tic a siguelized intersect. as the 4theleq, intersection should be analyzed.
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### 14.4 Intersection Capacity Utilization Percentage Standards; Mitigation; Compliance; Excess Capacity

### 14.4.1 Intersection Capacity Utilization Percentage Standards

The following Intersection Capacity Utilization (ICU) percentage standards, measured using the most recent methodology, shall be used when determining the adequacy of intersections within the applicable impact area:

| Zoning District | Adopted ICU Percentage |
| :---: | :---: |
| Rural and TR Districts | 73.0 (LOS C) |
| Town Center and TOD | 91.0 (LOS E) |
| All other Districts | 82.0 (LOS D) |

[^0]Where an intersection is located within more than one zoning district, the less restrictive ICU percentage shall apply to the entire intersection for purposes of complying with this Article.

### 14.4.2 Mitigation

Mitigation will not be required if the ICU percentage is at or below those established in Section 14.4.1 or when, as a result of proposed development, an increase in the ICU percentage is 3 percent or less.

Where an ICU percentage is above those established in Section 14.4.1 or, as a result of proposed development, becomes greater than the adopted standard AND has increased by more than 3 percent; a development application may be approved if the applicant proposes measures that fully mitigate the transportation impacts of the proposed development.

Mitigation, when-required, shall fully reduce the ICU percentage of the impacted intersection to either the adopted standard in Section 14.4.1 or to within 3 percent of the no-build ICU percentage.

Proposed mitigation measures required to meet the ICU percentage standards, of Article 14.4.1 may be modified, subject to Town Board approval, in order to substantially achieve the intent of this ordinance based upon professional engineering judgement provided by the Town Engineer.


A modification to the Ordinance standards, which may be considered as meeting the intent of the Ordinance, is where proposed mitigation at an impacted intersection provides measurable and beneficial surplus capacity (above and beyond that required to meet the minimum requirements) such that the surplus capacity may be counted toward credit in the mitigation of other impacted intersections. The method of measurement considered in determining the acceptability of such modifications will be the net effect on the cumulative ICU percentage totals.

Mitigation may also include Applicant funding of transportation improvements on planned or funded Town or NCDOT projects previously adopted such that the improvements can be advanced to mitigate the impacts of the proposed development. This funding mitigation may be accepted by the Town Board only where it is shown that such mitigation is a reasonable substitute for actual construction based on the ICU percentage totals and anticipated construction schedules of the projects. Proposed mitigation shall be included as a condition of approval.

Transportation improvements provided through mitigation, pursuant to this Article, shall be completed and available within three (3) years of the approval of the development proposal, unless expressly provided otherwise by the Town Board or other applicable Town permitting authority. Any improvements not completed prior to the issuance of a Certificate of Occupancy, shall be bonded at 115 percent of the cost of the remaining required improvements), as reviewed and approved by the Town Engineer. All necessary right-of-way for the required transportation improvements shall be acquired prior to the issuance of a Certificate of Occupancy.

### 14.4.3 Compliance

a. If the ICU percentage for an impacted intersection is greater than the adopted ICU percentage identified in Section 14.4.1 or, as a result of the proposed development, is anticipated to be greater than the adopted ICU percentage in Section 14.4.1, no application subject to the requirements of this Article shall be approved unless an applicant mitigates the impacts of the proposed development. This determination shall be based on methodology identified in section 14.4.2.
b. In the alternative to mitigation, the developer may elect to phase the project, reduce its intensity, or delay the project until the ICU percentage standards have been met as a result of a constructed transportation improvement by the Town, NCDOT or other party.

### 14.5 Contents of TIA

### 14.5.1 General

The TIA shall generally follow the guidelines set forth by ITE's publication entitled Transportation Impact Analysis for Site Development and be consistent with the Town of Huntersville TIA Process and Procedures Manual, or as required by the Town Engineer, and may include, but is not limited to, the following:
a. traffic analysis information related to trip generation, peak hour impacts, and other factors evaluated to determine compliance with applicable ICU percentage standards for intersections within the impact area;
b. site location map and site layout;
c. existing and proposed land uses;
d. timing and phasing of the proposed development, by month and/or year,
e. a narrative describing the project, including any special transportation-related impacts or considerations; and
f. other information determined by the Town's Traffic Engineer to be necessary in order to determine whether the proposed project complies with the requirements of this Article and the requirements of the ITE guidelines for the preparation of transportation impact analysis for site development.

### 14.5.2 Demand Measures.

TIAs shall take into account the following demand factors:
a. Existing Traffic Volumes;
b. Background traffic, including historical growth traffic and projected trips associated with approved, but unbuilt development(s); and
c. The trips to be generated by the proposed development.

### 14.5.3 Capacity Measures.

TIAs shall take into account the following existing or anticipated capacity measures:
a. Existing road segments and intersections;
b. Roadway and intersection improvements planned by the Town, NCDOT, or other party, scheduled to be completed and available within three (3) years of the approval of the development proposal and which either have or are reasonably certain to have all necessary governmental approvals and funding such that these time frames can be met.

### 14.5.4 Mitigation Measures Needed.

The TIA shall describe what, if any, transportation facility improvements within the impact area are needed in order for the proposed development to comply with Section 14.4 of this Article. A TIA that does not identify the transportation facility improvements within the impact area to comply with Section 14.4 will be returned to the Applicant as incomplete.

### 14.6 Intergovernmental Coordination

While the Town coordinates with NCDOT and other appropriate governmental agencies on development proposals, it is the responsibility of the Applicant to contact NCDOT to discuss access and traffic impact issues on state roads.

### 14.7 Appeals and Variances

An applicant may seek a variance from the terms of this Article or appeal a determination by the Administrator or other Town official or agency, made pursuant to the terms of this Article, to the Zoning Board of Adjustment, as provided in Article 11.3 of the Zoning Ordinance.


[^0]:    *ICU percentage relates to the relative capacity of an intersection to accommodate vehicular traffic where a value of 100 percent means that the intersection is at capacity and likely experiences congestion periods of 60 minutes.

