HOUSTON DISTRICT
PROJECT DEVELOPMENT

NHHIP - SEGMENT 3

PRELIMINARY
SUBJECT TO CHANGE

HNTB Corporation
1301 Fannin St , Suite 1800
Houston, TX 77002
TBPE Firm Registration No. 420

ROADWAY: I-45 NORTH
COUNTY: HARRIS
LIMITS FROM: BELTWAY 8
LIMITS TO: I-69

X X

CONCEPTUAL LAYOUT
NHHIP

COUNTY: HARRIS
LIMITS FROM: BW8
LIMITS TO: SPUR 527

CSJ:
DATE: 28-APR-2017
APPROVED: / /

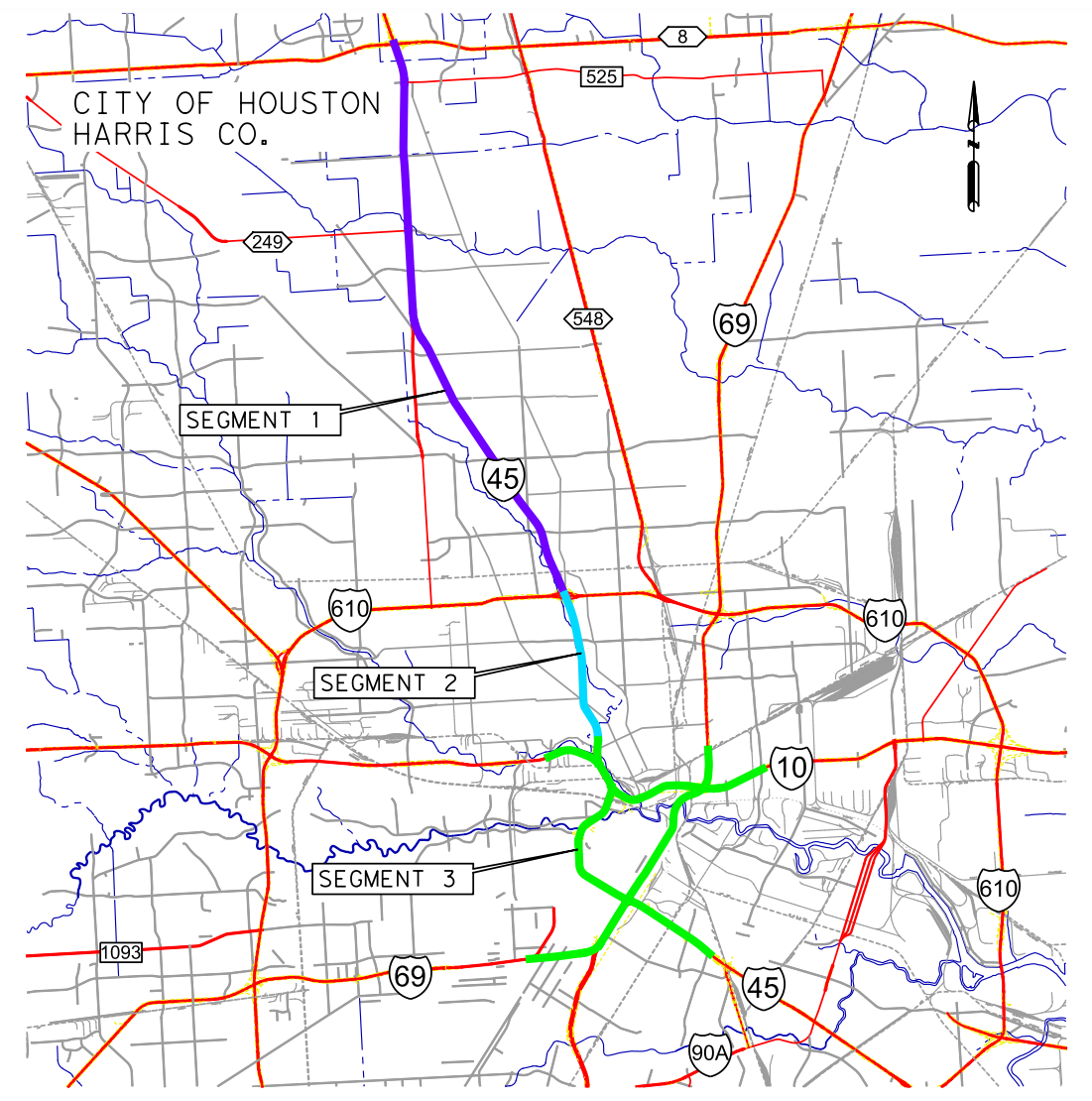
NOT A BIDDING DOCUMENT

PLAN LEGEND

SYMBOLOGY	ROADWAY	STYLE
CENTERLINE		━ ╍
I-45 MAINLANES	🟨	─
I-69/US 59 MAINLANES	▭	─
I-10 MAINLANES	🟩	─
SH 288 MAINLANES	🟪	─
I-610 MAINLANES	🟩	─
I-10 MAX LANES	🟦	─
MAX LANES	🟥	─
FRONTAGE ROADS	▭	─
LOCAL STREETS	▭	─
RAMPS	🟪	─
DIRECT CONNECTOR	🟧	─
POTENTIAL GREENSPACE	▨	
EXISTING RDWY TO BE REMOVED	▩	
SURPLUS ROW	▩	
EMBANKMENT		⌃⌃
PROPOSED CONTROL OF ACCESS		─╫─
PROP DEIS ROW		━ ━
PROP FEIS ROW		━ ━
EXISTING ROW		— —
ACCESS ROAD		┄┄
METRO RAIL RED (MAIN STREET LINE)		┼┼┼
METRO RAIL(EAST END LINE		┼┼┼
METRO RAIL(SOUTHEAST LINE)		┼┼┼
RAILROAD		┼┼┼
LIMITS OF FLOODWAY		─
EXISTING LANE DIRECTIONAL INDICATOR:		
MAIN LANES		⇨
FRONTAGE ROADS/TURNAROUNDS		⇨
PROPOSED LANE DIRECTIONAL INDICATOR:		
MAIN LANES		→
FRONTAGE ROADS/TURNAROUNDS		→
RAMPS		→
DIRECT CONNECTOR		→
MAX LANES		→

SCALE
0 400 800 1200 1600

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.



SEGMENT 3
LOCATION MAP : N.T.S.

SURVEY DATA: TEXAS SOUTH CENTRAL
ZONE #4204 (HARRIS COUNTY)
ADJUSTED TO SURFACE USING
COMBINED SCALE FACTOR 1.00013

Concern: IH 10 westbound express lanes reduced from three lanes to one lane
(This is probably in anticipation of future westward extension of the express lanes)

May 2017 Update:
New "FUTURE" connection ramp from IH 45 southbound MaX lanes to IH 10 westbound express lanes

May 2017 Update:
45 southbound connection to southbound downtown Spur has 3 lanes (previously was 2 lanes)

Concern: On-ramp from Quitman has no merging zone, creating a dangerous choke point with traffic on the ramp.
Fix: include a dedicated lane for the Quitman on-ramp

May 2017 Update:
10 eastbound main lanes have been shifted to the west edge of the right-of-way

May 2017 Update:
New "FUTURE" connection ramp from IH 10 eastbound express lanes to IH 45 northbound MaX lanes

May 2017 Update:
Downtown Spur northbound has two lanes connecting into 45 northbound main lanes (previously was one lane)

May 2017 Update:
45 SB exit to Milam is now from the same ramp going to the downtown spur (was previously directly form the 45 main lanes)

May 2017 Update:
10 EB to DTN CONN is now much further south, and the eixt is now 2 lanes (previously was 1 lane)

May 2017 Update:
Northbound frontage road has been shifted to the west south of Allen Parkway (previously crossed to to Houston Street north of Allen Parkway)

May 2017 Update:
An extra lane has been added in both directions

May 2017 Update:
Exit now has 3 lanes (previously was 2)

May 2017 Update:
IH 10 eastbound exit to Smith Street is now 1 lane (previously was 2 lanes)

Major Concern: This is the only definite entrance to the northbound IH 45 MaX lanes inside the loop. (A potential connection from the IH 10 eastbound express lanes is shown.)

May 2017 Update:
45SB to 10 EB ramp is shifted slightly east

Major Concern: The Fannin exit is removed
Fix: restore the exit

May 2017 Update:
San Jacinto on-ramp is moved from the west side of the street to the east side

Concern (fix not expected):
This single-lane entrance is the only access to SH 288 southbound from the entire downtown area.

Concern: Traffic on this ramp may weave across five lanes of traffic to reach the Almeda exit. Potential remedy: restore the Fannin exit to give motorists another Midtown exit option

Concern: The merge-weave zone for the lanes from SH 288 is short, only about 1400 feet, about the same as the currently-existing design

Concern: On-ramp to IH 45 southbound from Pierce Street is removed

May 2017 Update:
U-turn added at Lamar

Concern: Traffic making the 69SB TO 45SB connection must weave across 3 lanes in a distance of about 2200 feet just after entering the tunnel, when people's vision will be adjusting to darker conditions (during the day)

May 2017 Update:
45SB to 69 SB ramp is new, replacing previous connection further south

May 2017 Update:
69 HOV lanes and on-ramp from Chenevert are realigned

May 2017 Update:
Two lanes are maintained on the 10 EB/HARDY TO 69SB ramp, previously was reduced to 1 lane at this point

May 2017 Update:
IH 10 eastbound frontage road realigned to eliminate section on Jensen

May 2017 Update:
IH 10 eastbound exit to Jensen eliminated

May 2017 Update:
IH 10 eastbound, three main lanes are maintained through the IH 69 interchange

May 2017 Update:
IH 10 eastbound express lanes reduced to one lane before merging back into main lanes